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A DESCRIPTIVE AND ILLUSTRATED CATALOGUE
OF
MINIATURE PAINTINGS OF THE
JAINA KALPASŪTRA

AS EXECUTED IN THE
EARLY WESTERN INDIAN STYLE

(WITH 45 PLATES)

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PREFACE

The history of Early Western Indian miniature painting has been outlined by me in my book *The Story of Kalaka*¹ and illustrative examples have been reproduced in the plates. The most prolific sources of material for that school of miniature painting are the numerous paper manuscripts of two Svetambara Jain works entitled the *Kalpasutra* and the *Kalakacaryakatha*. The miniatures of the latter are presented in my book cited above, those of the former provide the subject of the present volume. The frequency with which the Jains illustrated these works and the comparative rarity of illustrations in other works are mentioned in my *Story of Kalaka* and the point may be indicated graphically by referring to the fact that among the 3507 manuscripts lying in the Jain libraries of Limbdi² only manuscripts of these two texts are listed as bearing illustrations. It is true that manuscripts of other Jain texts sometimes carry paintings in this style but the number of their illustrations is few and the subjects as far as I have observed are limited to Tirthankaras monks gods goddesses laymen and laywomen. No other Jain work has yet been reported with illustrations in this style that represent a series of events narrated in the accompanying text. Outside the Jain environment there are known at least two texts illustrated with series of miniatures done in the same style namely the *Vasanta Vilasa* (now owned by the Freer Gallery of Art Washington D C) and the *Magha Purana* but so far only one manuscript of each has been published. Of the *Kalpasutra* and the *Kalakacaryakatha* however dozens possibly hundreds of illustrated manuscripts are in existence of these two works the *Kalpasutra* is the commoner and the number of events it illustrates is at the same time the greater. The *Kalpasutra* is therefore the storehouse par excellence of examples of this school of painting.

Miniatures from the *Kalpasutra* have been previously published chiefly by Dr W Huttemann who gave examples in color and in black and white from a single manuscript in the Museum für Volkerkunde Berlin and by Dr A K Coomaraswamy who gave black and white reproductions of the miniatures contained in a number of manuscripts belonging to the Museum of Fine Arts Boston³. In neither of these publications was the author able to illustrate from his materials as many scenes as are available in the manuscripts now lying in the United States. In addition neither author succeeded in identifying correctly all the scenes he had before him. Dr Huttemann gave full descriptions of a few of the scenes he reported. Dr Coomaraswamy gave only very brief indications of the subject matter. My present work aims to present at least one example of every scene illustrated in the *Kalpasutra* manuscripts known to me in the United States and to give sufficient explanation to make the

¹ Brown, W Norman *The Story of Kalaka* chap II pp 13 ff Smithsonian Institution Freer Gallery of Art Oriental Studies No 1 1933. Examples of this school of painting are now known from A.D. 870 (see *Journal of the American Oriental Society* vol 53 p 309 1933).

² The catalogue is entitled *Limbdi na Ja na Jnanabhandaran Hastalikhita Pratnam Sūtrapatra* Bombay Agamodaya Samiti 1928.

³ For precise bibliographical references see below p 2.

painting fully intelligible. Presumably the scenes offered will exemplify almost the entire number illustrated in those Kalpasūtra manuscripts that employ the Early Western Indian style of painting.⁴ A few points in some of the paintings are still not clear to me; but taken as a whole this work should form a guide to the Kalpasūtra miniatures, by means of which almost any scene in any series of manuscript illustrations of that work executed in that style can be identified at a glance without the necessity for special research.

In the preparation of this work, I have been aided above all by the Freer Gallery of Art, Washington, which has gone to the greatest trouble to assemble for me materials and photographs. Its own beautiful manuscript of the Kalpasūtra provides the basis of the catalogue, and photographs it obtained for me from other sources have made it possible for the work to attain whatever degree of completeness it may possess. To Mr. J. Ellerton Lodge, Curator of the Freer Gallery, goes my especial gratitude for interest, sympathy, advice, and judgment in selecting my illustrations; and to Miss Grace Dunham Guest, Assistant Curator, my appreciation of her patient cooperation in collecting materials.

The Museum of Fine Arts, Boston, has generously assisted me with the full use of its valuable manuscripts, and in this connection I have also to thank Dr. Coomaraswamy, Curator of the Indian section there, who took great pains to see that I got all that I wanted.

The Heeramaneeck Galleries, New York, have been equally generous in providing me with material, and my debt can easily be estimated by glancing at the list of their manuscripts from which I have drawn (see in my Introduction).

The Cleveland Museum of Art gave me unhindered use of its fine manuscript belonging to the Edward L. Whittemore Collection.

The Metropolitan Museum of Art, New York, the Fogg Art Museum, Cambridge, and the Detroit Institute of Arts, each of which owns one or more miniatures of this school, placed their materials at my disposal.

Dr. Helen M. Johnson has been kind enough to read over my book in manuscript and give me the benefit of her scholarship.

Last of all, I must acknowledge a debt to the John Simon Guggenheim Memorial Foundation, on which I had the honor to hold a fellowship during the years 1928 to 1929. The study that I was specifically appointed by the Foundation to pursue is represented by my book, *The Story of Kālaka*, but the opportunity afforded me by the Foundation was also used for the study of manuscripts of the Kalpasūtra in Europe and India and especially of the Early Western Indian style of miniature painting, and the present work is therefore in part a consequence of the Foundation's generosity.

W. NORMAN BROWN.

MOYLAN, PENNSYLVANIA, February 3, 1934.

⁴ There are also manuscripts illustrated in the later, Rajput-Mughal, style of painting.

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A DESCRIPTIVE AND ILLUSTRATED CATALOGUE OF MINIATURE PAINTINGS OF THE JAINA KALPASŪTRA AS EXECUTED IN THE EARLY WESTERN INDIAN STYLE

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(WITH 45 PLATES)

INTRODUCTION

The Kalpasūtra¹ a canonical work of the Śvetāmbara Jains is in three parts. The first is the Jinacarita 'Lives of the Jinas (Victors Saviors)' it carries by far the greatest number of illustrations. The second is the Sthaviravali 'Succession of Pontiffs' which is less abundantly illustrated. The third is the Samacāra 'Rules for Monks at the Paryusana Season' this has the fewest illustrations. The character of the different parts of the Kalpasūtra will be made sufficiently evident for our purposes in the material included with the specific description of the illustrations.

The paintings are to a large extent clichés in motif and composition but within those limits great variation was allowed the individual artists. Thus a single scene may be represented with a number of minor variations as that of Krishna endeavoring to bend Aristanemi's arm (figs. 104, 105). So too the quality of different artists' work varies greatly as can readily be seen from the illustrations reproduced in this book.

The general character of Early Western Indian miniature painting has already been described by me.² A few additional remarks should be made here with reference to the Kalpasūtra specifically. The costumes are entirely Indian. In the case of lay figures the paintings give interesting examples of contemporary textile designs in Gujarat. But in the case of monks and nuns it is doubtful if the various designs of white or red dots and lines over a gold background represent patterns in the material of the robes. The use of these dots and lines over gold was an accepted technique of depicting the white robe (cf. the use of gold for white in fig. 21) and alternated with the use of pure white in those manuscripts that employ a yellow print instead of gold. In the fourteenth, fifteenth and sixteenth centuries the monks probably as now wore the white robe unrelieved by pattern except occasionally for a colored stripe along the end.

The distinction between male and female lay figures is not always easy to observe except for the marks on the forehead. Women usually wear the spot (*tilaka*) men

¹ For the literary history of the Kalpasūtra see M. Winternitz, *Die buddhistische Literatur und die heiligen Texte der Jānas* (Geschichte der indischen Literatur 2. Band, Leipzig 1920) pp. 309 f. The language of the work is Ardhamāgadhī Prakṛit. In the second (translated into English) and revised edition of Professor Winternitz's *A History of Indian Literature* vol. 2 (Calcutta University of Calcutta 1933) the Kalpasūtra is discussed on pp. 462-464.

² Br. chap. II (pp. 13-24). Br. EA (171-179). For abbreviations see below pp. 3-4.

wear the U-shaped line, which is sometimes crossed by three horizontal lines. A failure to note this point precisely has sometimes led to wrong interpretation; for example, it is clear that the king's attendants were male, not female as has been said.³ There are occasional exceptions to the general practice of forehead marking, as when King Siddhārtha wears the *tilaka* (fig. 34). Monks have no forehead mark at all, or else wear the *tilaka*; Tirthankaras have either the *tilaka* or the U-sign. Nuns seem to bear no forehead mark, but they can always be distinguished from monks by the treatment of the robe, which covers the whole body and extends up behind the neck and head, while with monks it leaves one shoulder bare and stops at the neck. Laywomen regularly wear a bodice. Men, like women, have long hair. (See fig. 40.)

The manuscripts from which I have drawn my illustrations are 14 in number, all paper, of which the oldest (Hf) is dated = A.D. 1460, and the next oldest (M18.104) is dated = A.D. 1462.⁴ From some I have selected many paintings; from others only a few. In giving citations I indicate the manuscript, the folio number, and the side of the folio, whether recto (r) or verso (v). The manuscripts are listed below, with my abbreviations.

- B17.2276 Museum of Fine Arts, Boston. MS. of the Kalpasūtra and the Kālakācāryakathānaka. 106 folios, with 17 miniatures (15 of the Kalpasūtra; 2 of the Kālakācāryakathānaka). Not dated, possibly fifteenth century. Figures 3, 10, 36, 47 (total of 4).
- B17.2277 Museum of Fine Arts, Boston. MS. of the Kalpasūtra and the Kālakasūrikathānaka. 78 folios, with 34 miniatures (28 of the Kalpasūtra; 6 of the Kālakasūrikathānaka). Dated Samvat 1554 = A.D. 1497. Figures 7, 19, 46, 48, 49, 132, 145 (total of 7).
- B17.2278 Museum of Fine Arts, Boston. MS. of the Kalpasūtra (Jinacarita and Sthavirāvali only). 107 folios, with 27 miniatures. Not dated, probably sixteenth century. Figures 93, 131, 141 (total of 3).
- B22.364 Museum of Fine Arts, Boston. MS. of the Kalpasūtra. 147 folios (nos. 16, 29, 43 missing), with 39 miniatures. Dated = A.D. 1494. Figures 12, 133, 134, 147 (total of 4).
- Cleve Cleveland Museum of Art, Edward L. Whittemore Collection. MS. of the Kalpasūtra. Originally of more than 76 folios (nos. 1, 47, 69-72, and some after 76 missing), with 24 preserved miniatures. Not dated, probably fifteenth century. Figures 41, 71, 98 (total of 3).
- Fr Freer Gallery of Art, Washington. MS. of the Kalpasūtra and Kālakācāryakathā. 124 folios, with 50 miniatures (43 of the Kalpasūtra; 7 of the Kālakācāryakathā). Not dated, probably fifteenth century (for a full page of this MS. in full color see Br pl. 12). Figures 2, 4, 6, 9, 14, 16, 18, 42, 50, 51, 53, 55, 58, 61, 64, 67, 68, 70, 72, 73, 77, 80, 81, 90, 96, 100, 103, 108, 111, 115, 119, 124, 128, 130, 136, 139, 146, 150, 151, 152 (total of 40).

³ Statement in C 35 (for explanation of abbreviation see p. 3). There is also no reason to believe that women observed seclusion as stated in C 75.

⁴ Some older dated illustrated paper MSS. of the Kalpasūtra are mentioned in the following places: Velankar, Catalogue of MSS. in Bombay Branch of the Royal Asiatic Society Library, no. 1429, dated = A.D. 1415; Jacobi, The Kalpasūtra of Bhadrabāhu, p. 28, Leipzig, 1879, a MS. dated = A.D. 1427; MS. no. 512 in the Limbdi catalogue (see above, Preface, note 2), dated = A.D. 1457. I once published examples from a paper MS. as of A.D. 1147, but the date is false (see Br 20); Dr. Hirananda M. Sastri, in *Jaina Gazette* (Madras), vol. 28, p. 113, 1932, claims to have illustrated paper MSS. of the eleventh century, but offers no evidence. Of palm-leaf MSS. illustrating scenes from the Kalpasūtra I know two: one of the "thirteenth century" (specific date not given) used for five illustrations in full color in C. J. Shah, *Jainism in North India 800 B.C.-A.D. 526*, 1932, corresponding to our figures 4, 81, 87, 97 and 100, 130; the second is dated Samvat 927 = A.D. 870, and has five illustrations corresponding to our figures 2, 3 (in place in text but in representation more like our figure 150), 58, 146, 80.

- Ha Heeramanek Galleries, New York MS of the Kalpasūtra and Kalakācāryakathā 162 folios (nos 52 and 53 missing, with their nos written on no 51, 2 folios bearing no 28), with 87 miniatures (79 of the Kalpasutra 8 of the Kalakācāryakathā) Not dated, probably sixteenth century. Figures 5, 8, 11, 20, 34, 35 38, 39 45, 52, 59, 62, 63, 66, 69, 78, 79, 82, 84 85, 86, 87, 88, 94, 97, 101, 102, 106 109 112, 113, 114, 116, 117, 123, 125, 126, 127, 135, 137, 138, 140 (total of 42)
- Hb Heeramanek Galleries, New York MS of the Kalpasūtra 141 folios (nos 1, 2, 139 missing, no 2 has been recopied), with 43 miniatures Not dated, probably sixteenth century Figures 17, 43, 91, 99, 110, 121 (total of 6)
- Hc Heeramanek Galleries, New York MS of the Kalpasutra 129 folios, with 50 miniatures Dated Samvat 1577=A D 1520 Figures 15 104 (total of 2)
- Hd Heeramanek Galleries, New York MS of the Kalpasutra with commentary 75 folios, with 20 miniatures and spaces reserved for many others that were not painted in Dated Samvat 1559=A D 1502 Figures 49, 142 (total of 2)
- He Heeramanek Galleries, New York MS of the Kalpasūtra 147 folios, with 48 miniatures Dated Samvat 1569=A D 1512 Figures 95, 105, 107 (total of 3)
- Hf Heeramanek Galleries, New York MS of the Kalpasutra and Kalakācāryakathā 82 folios, with 24 miniatures (19 of the Kalpasūtra, and 5 of the Kalakācāryakathā) Dated Samvat 1517=A D 1460 Figure 74 (total of 1)
- Hg Heeramanek Galleries, New York MS of the Kalpasūtra 143 folios, with 64 miniatures Not dated probably late sixteenth or early seventeenth century Figures 1, 13, 21, 22, 23, 24, 25, 26, 27 28, 29, 30, 31, 32, 33, 37, 44, 54 56 57, 60, 65 75, 76, 83, 89, 92, 120, 122, 129, 143, 144 148, 149 (total of 34)
- M18 104 Metropolitan Museum of Art, New York MS of the Kalpasūtra, originally having 78 folios 7 miniatures from this MS are in the Metropolitan, 2 in the Museum of Fine Arts, Boston (MS 19 142), 1 in the Fogg Art Museum, Cambridge, and 1 in the Detroit Institute of Arts Dated Samvat 1519=A D 1462 Figure 118 (total of 1)

The works of reference most frequently cited in this volume are listed below with the abbreviations I employ

- AS The Ācārāṅgasūtra Cited by section The citations are accompanied by references to Jacobi's translation (see below under "Jtr"), which is cited by page
- Bl The Life and Stories of the Jaina Savior Parsvanatha Baltimore The Johns Hopkins Press, 1919 Analysis of Bhavadevasuri's Parsvanathacaritra Cited by page
- Br W Norman Brown, The Story of Kalaka Washington Smithsonian Institution, Freer Gallery of Art, Oriental Studies No 1, 1933 Cited by page
- BrEA W Norman Brown, Early Vaishnava Miniature Paintings from Western India Eastern Art, vol 2 1930, pp 167 206 Cited by page and figure
- C Ananda K Coomaraswamy, Catalogue of the Indian Collections in the Museum of Fine Arts, Boston Part IV, Jaina Paintings and Manuscripts Boston Museum of Fine Arts, 1924 Cited by page and plate
- CA Jarl Charpentier, Studien über die indische Erzählliteratur 4 Devendra's *tikā* zu Uttarajjhayana XXII Ein jainistischer Beitrag zur Kṛṣṇa Sage, Zeitschrift der deutschen morgenländischen Gesellschaft, vol 64, pp 397 429, 1910 Has the story of Aristanemi, or Nemi, the twenty-second Tirthankara Cited by page
- CP Jarl Charpentier, Die Legende des heiligen Parsva, des 23 tirthakara der Jainas Aus Devendra's *tikā* zu Uttaradhyayana XXIII Zeitschrift der deutschen morgenländischen Gesellschaft, vol 69, pp 321-359, 1915 Cited by page
- Gl Helmuth von Glasenapp Der Jainismus Berlin Alf Hager, 1925 Cited by page and plate
- Hü Wilhelm Hüttemann, Miniaturen zum Jinacaritra, Bäsler-Archiv, vol 4, pp 47 77, 1914 Cited by page and figure

- Jo Helen M. Johnson, *Triṣaṣṭīśālākāpuruṣacaritra*, vol. I, *Ādiśvaracaritra*, translated into English. (Gackwad's Oriental Series, vol. 51.) Baroda: Oriental Institute, 1931. Translation of "R" (see below). Cited by page.
- Jpa H. Jacobi's introductory analysis of "PP" (see below). Cited by page.
- Jtr H. Jacobi, *Gaiṇa Sūtras*, translated from Prakrit. Part I. The *Ākārāṅga Sūtra*; The *Kalpa Sūtra*. (Sacred Books of the East, vol. 22.) Oxford: Clarendon Press, 1884. The translation occasionally needs rectification. Cited by page.
- Kirfel W. Kirfel, *Die Kosmographie der Inder*. Bonn und Leipzig: Kurt Schroeder, 1920. Cited by page.
- KS H. Jacobi, *The Kalpasūtra of Bhadrabāhu*, edited with an Introduction, Notes, and a Prākṛit-Saṃskṛit Glossary. (Abhandlungen für die Kunde des Morgenlandes, VII Band, no. 1.) Leipzig: Brockhaus, 1879. The abbreviation "KS" is used only for the *Jinacarita*; "KSsth" is used for the *Stavirāvali*; and "KSsām" for the *Sāmācārī*. Cited by section.
- KSsām *Kalpasūtra*, *Sāmācārī*. See under "KS".
- KSsth *Kalpasūtra*, *Sthavirāvalī*. See under "KS".
- M *Triṣaṣṭīśālākāpuruṣacaritra* of Hemacandra: Parva 10, *Mahāvīrasvāmicaritra* (the Sanskrit text). Bhavnagar: Jainadharmaśāstrakāśabhā, 1908. Cited by canto (*sarga*) and stanza.
- PP H. Jacobi, *Sthavirāvalī Charita*, or *Parīṣiṣṭaparvan*, being an appendix of the *Triṣaṣṭīśālākā Putuṣa Charita* by Hemachandra. The Sanskrit text with an introductory analysis. Calcutta: Bibliotheca Indica, 1891. Cited by canto (*sarga*) and stanza.
- PSM Har Govind Das T. Sheth, *Pāṇa-Sadda-Mahāṇṇavo*. 4 vols. Calcutta: Har Govind Das T. Sheth, 1923-28. A Prakrit-Hindi dictionary.
- R *Triṣaṣṭīśālākāpuruṣacaritra* of Hemacandra: Parva 1, *Ādiśvaracaritra* (the Sanskrit text). Bhavnagar: Jainadharmaśāstrakāśabhā, 1904. Cited by canto (*sarga*) and stanza.
- Sh C. J. Shah, *Jainism in North India, 800 B.C.-A.D. 526*. New York: Longmans, Green and Co., 1932. Cited by page and plate.

In the remainder of this volume I present the illustrations with my explanatory comment on the pages facing the plates. The story opens with the life of Mahāvīra, the twenty-fourth of the Jain Tīrthankaras (Saviors), then goes to the life of Pārśva, the twenty-third Tīrthankara, then to that of Ariṣṭanemi (or Nemi) the twenty-second. The Tīrthankaras from the twenty-second back to the second are mentioned but no stories are told concerning them. The text then takes up the life of Ṛṣabha (or Ādiśvara), the first Tīrthankara. With this the *Jinacarita* is concluded. There follows the *Sthavirāvalī*, an enumeration of the *Sthavīras* (pontiffs) of the order founded by Mahāvīra. Finally comes the *Sāmācārī*, the rules for monks at the *Paryuṣaṇā* season.

My method is to cite the pertinent sections of KS, giving as much of the story as is necessary to make the picture clear. When KS is too brief for clarity, as is often the case, I draw information from other sources. Then follows a description of the painting and any further comment that seems to me useful. Reference is also made to similar scenes published elsewhere.

Many scenes are reproduced in varying, synonymous examples, to illustrate the scene's chief variations. The paintings are generally accompanied by marginal legends in Sanskrit, often bad, or Gujarati, which I quote when they help.

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PLATE 2

- FIG. 5 (Ha 4v) The Brahmani Devananda on her couch
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PLATE 3

- FIG. 8 (Ha 9r) Śakra on throne with court
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PLATE 4

- FIG. 11 (Ha 16r) Śakra commands Harinaigamesin
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PLATE 8

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PLATE 9

- FIG. 30. (Hg,32r) The ocean of milk.
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 32. (Hg,33v) The jewel heap.
 33. (Hg,34r) The fire.

PLATE 10

- FIG. 34. (Ha,34v) Triśalā awakens King Siddhārtha.
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PLATE 31

- FIG. 104. (He,79r) *a.* Ariṣṭanemi blows Krishna's conch.
b. Krishna tries to bend Ariṣṭanemi's arm.
 105. (He,90r) Krishna tries to bend Ariṣṭanemi's arm.
 106. (Ha,98r) Krishna and his wives urge Ariṣṭanemi to marry.

PLATE 32

- FIG. 107. (He,90v) Krishna urges Ariṣṭanemi to marry.
 108. (Fr,68r) *a.* Ariṣṭanemi riding to the bridal pavilion.
b. Ariṣṭanemi decides to leave the world.
 109. (Ha,99r) *a.* Ariṣṭanemi riding to the bridal pavilion.
b. Ariṣṭanemi decides to leave the world.

PLATE 33

- FIG. 110. (Hb,88v) *a.* Ariṣṭanemi riding to the bridal pavilion
b. Ariṣṭanemi decides to leave the world.
 111. (Fr,68v) *a.* Ariṣṭanemi gives away his possessions.
b. Ariṣṭanemi plucks out his hair.
 112. (Ha,100r) Ariṣṭanemi plucks out his hair.

FIG 113 (Ha 101r) *Aristanemi s samarasana*
 114 (Ha 104r) *Aristanemi as a Siddha*
 115 (Fr 73r) *Ten Tirthankaras*

FIG 116 (Ha 110r) Rsabha in the Sarvarthasiddha heaven
117 (Ha 110v) The patriarch Nabhi and his wife Marudevi
118 (M18 104 55v) Rsabha's birth

FIG 119 (Fr 75v) *a* Rsabha's birth
b Rsabha's lustration and bath at birth
 120 (Hg 100v) Rsabha's marriage
 121 (Hb 100v) Rsabha anointed the first king

FIG 122	(Hg 101r)	Rsabha teaches the arts
123	(Ha 112v)	Rsabha invents pottery
124	(Fr 77r)	a Rsabha gives away his possessions b Rsabha plucks out his hair
125	(Ha 114r)	Rsabha receives the first alms

FIG 126 (Ha 115v) Rsabha s *samavasarana*
 127 (Ha 116r) Marudevi's omniscience
 128 (Fr 70v) Rsabha as a Siddha
 129 (Hg 102v) a Rsabha in meditation
 b Conquests of the Cakravartin Bharata

FIG 130 (Fr 81r) The eleven Ganadharas of Mahavira
131 (B17 2278 95) The eleven Ganadharas of Mahavira
132 (B17 2277 54) The eleven Ganadharas of Mahavira

FIG 133 (B 2 364 107 left) Five of Mahavira's Ganadharas (and the nun Candana?)
 134 (B22 364 107 right) Six of Mahavira's Ganadharas
 135 (Ha 122v) One of Stūlābhadrā's sisters with the Sthavira Bhadrabahu (?)

FIG 136 (Fr 85v) *a* Sthulabhadra as a lion in a cave with his sisters
b Sthulabhadra's sisters before Bhadrabahu (or Sthulabhadra)
 137 (Ha 125r) Sthulabhadra as a lion with the eldest of his seven sisters
 138 (Ha 125v) Sthulabhadra's six other sisters
 139 (Fr 86r) The courtesan Kosa and the king's charioteer

PLATE 32

- FIG. 140. (Ha,131v) *a*, Vajra being given to his father
b, Vajra in care of the nurse
 141. (B17,2278,98) *a*, Vajra being given to the nurse
b, Vajra in his cradle
 142. (Hd,63r) *a*, Vajra in his cradle
b, Vajra being nursed by the nurse
c, The nurse who cared for Vajra
 143. (Hg,110v) *a*, Vajra in his cradle
b, Vajra chooses his father as his plaything
 childish plaything

PLATE 33

- FIG. 144. (Hg,113r) *a*, Raghupati and Pradyumna
b, Defeat of Pradyumna
 145. (B17,2277,61) A Shavira
 146. (Fr,91r) Mahāvira as a Siddha
 147. (B22,364,124) Indrabhūti Gautama

PLATE 34

- FIG. 148. (Hg,132v) *a*, Rule of conduct of the monks
b, Rule of conduct of the nuns
 149. (Hg,141v) Monks, nuns, and lay devotees
 150. (Fr,168v) Mahāvira preaching the Śāstā
 151. (Fr,109r) Part of Mahāvira's sermon

PLATE 35

- FIG. 152. (Fr,cover) The fourteen lucky dreams

ILLUSTRATIONS AND DESCRIPTIONS

PLATE I

FIG. 1 Hg 21 The five auspicious events in Mahāvira's life K.S. 1 (Jtr 217) The five
the asterism
d from De
5) obtained

This list of five auspicious events does not correspond with the usual five of a Tirthankara. According to PSM under *pañca kalyāṇa* they are (1) descent from heaven (*cjavana*) (2) birth (*janma*) (3) initiation (*dikṣā*) (4) omniscience (*kevalajñāna*) and (5) nirvana. These are the scenes represented in our painting and discussed in detail under our figures 2 58 73 80 81.

In our painting the top register shows Mahāvira as a god in heaven and his birth the middle register shows him plucking out his hair the bottom register shows his *samāśarana* (that is his omniscience—the paintings frequently use the title *jina* for that scene) and his nirvana as a Siddha.

The title of the picture is guaranteed for us by the legend *pārśvapañcakalyāṇa* aka (five auspicious events in the life of Pārśva) which in the same MS accompanies the corresponding illustration for Pārśva (our fig. 92).

FIG. 2 Fr 11 (cf Hu 49 71 f. C 41 45 54 pls I I IV I XV 1) Mahāvira in the Puspottara heaven K.S. 2 (Jtr 218). Before descending to the earth for his final existence in the saṃsāra (round of birth) Mahāvira had dwelt in the Puspottara heaven for 20 *sāgaropamas* (an incalculable period of time cf Kufel 339). He descended on the sixth day of the light half of the month Āśāḍha in the middle of the night to take the form of an embryo in the womb of the Brāhmin Devanandī in the town of Kumālagrāma.

On a lion throne sits Mahāvira dressed only in a loincloth (Hu 71 also sees shoes in similar figures) but crowned and fully ornamented. He is in the cross legged *padmāsana* posture called by the Jains *parvāṭa* (Ja 359) the hands lying one upon the other with palms upward. Above Mahāvira is an honorific parasol and above this are two elephants (direction-elephants *dhānaga*) with trunks upraised in the conventional attitude of sprinkling water constituting a symbol of fertilizing clouds and hence of general auspiciousness. Below them on a level with Mahāvira's head in small architectural units are seated two heavenly musicians (*gandharvā*) dressed in lower garment (*dhottā*) and scrf playing flutes. Beside the body of Mahāvira under pointed arches stand two fly whisk bearers. In the bottom corners are seated two other attendants with hands upraised. Over the top of the picture is a band of swans (*hamsas*) in an arch. Conventionalized flowers fill in the upper corners.

Similar scenes with other Tirthankaras appear in our figures 87 101 102 116.

In a variant (Hg 1 not illustrated in this work) the future Tirthankara is seated cross legged without the throne being shown. Beside him are the two attendants. In the upper corners are two duplicates of himself in smaller size and below him are two others.

FIG. 3 B17 2276 2 (cf C 41 pl I 2) A Tirthankara as teacher K.S. 2 (Jtr 218). The figure seems to symbolize the 23 Tirthankaras mentioned in the text as preceding Mahāvira.

A Tirthankara in monk's garb sits within a spired throne. His legs are crossed with soles upward, his right hand holds up a rosary before his breast, his left hand lies in his lap. The ears are long and pierced with large holes in the pendulous lobes. On the subsidiary corner spires of the throne roof are two parrots.

The nature of the spired throne is indicated by other paintings from the K.S. MSS, which show it from the side (see our figs 7 9 et passim). It represents the seat of a Jina image under

the principal spire of a temple or in a heavenly palace or car (*vimāna*), conventionalized as an honorific seat for any distinguished being. In side views the spire is pushed back or tilted back to allow an unobstructed view of the honored one. Often the inside wall of the spire is decorated (cf. fig. 9). From this kind of seat is probably derived the seat used by monks (cf. Br 17,118), and in modern wooden examples of the latter the spire is reduced to a flat back, leaning backwards, with little or no indication of the spire other than a rounding at the top.

For similar compositions see our figures 4, 145.

FIG. 4. Fr,2r (cf. Sh pl. XIV; Hū 50 ff., fig. 1; C 45, 54, pls. IV.2, XV.2). A Tīrthankara and the eight auspicious symbols. KS 2 (Jtr 218); cf. under our figure 3. The one figure apparently symbolizes the 23 Tīrthankaras who preceded Mahāvīra (C 54 takes it for Mahāvīra, but the identification hardly seems correct, for at this point Mahāvīra had not yet become a monk).

In a spired throne viewed from the front sits a Tīrthankara (as in our fig. 3), right hand upheld in a gesture of teaching (*kaṭakahasta*), not holding the rosary as in our figure 3 (so also without the rosary in C pl. XV.2, but with it in C pl. IV.2), under the right arm the monk's broom (*rajoharaṇa*), on the right shoulder the monk's mouth-cloth (*mukhavastrikā*). He is dressed in the white robe of the Śvetāmbara monks, the whiteness being indicated by white dots over a gold background. On each side of the Tīrthankara stands a monk, evidently a disciple, with hands joined in adoration. Above the Tīrthankara are four of the eight auspicious symbols, below him the remaining four.

The eight auspicious objects (*aṣṭamaṅgala*) are regularly associated with the Tīrthankaras. Hū brings out this point in a long discussion, but he did not have in the Berlin MS. a painting showing them and a Tīrthankara together. In the MSS. to which I have had access I have not found an instance of the auspicious objects separated from a Tīrthankara, but Hū 54 gives a line drawing of such a miniature and Sh pl. XIV reproduces one in full color from a palm-leaf MS.

These eight auspicious objects, starting with our upper left-hand corner, are: mirror (*dapṇaṇa*, *darpaṇa*), throne of distinction (*bhaddāsana*, *bhadrāsana*), powder-vase (*vaddhamāṇaga*, *var-dhamānaka*), full water vessel (*kalasa*, *kalaśa*), pair of fish (*matsyayugma*), the *sirivaccha* (*śrīvatsa*) symbol, the *nandiyāvatta* (*nandyāvarta*) symbol, and the *soṭṭhiya* (*svastika*) symbol.⁵

⁵ The eight auspicious objects are mentioned in Jo 113, and discussed in Hū 50-54. The full jar is discussed by Coomaraswamy, *Yakṣas*, pt. II, pp. 61-64, Washington: Smithsonian Institution, 1931. The two eyes associated with the jar, not explained by Coomaraswamy, are said by Hū to symbolize the clairvoyant knowledge (*ohiṇḍaṇa*, *avadhiṇḍaṇa*) which sees to the uttermost limits (cf. Jo 105, 109, 188, 201). Possibly the association of the eyes with the vessel of plenty (clouds) may indicate that they are a vestigial representation of the sun, which sees all and knows all (cf. also Atharva Veda 19.53.3, where the full jar is before Time = the Sun, and may be the sky full of rain). The *vardhamānaka* and *śrīvatsa* symbols are treated by Coomaraswamy, *Ostasiatische Zeitschr.*, pp. 181-182, 1927-28; and by Johnson, E. H., *Journ. Roy. Asiatic Soc.*, pp. 558 f., 1931; and *ibid.*, pp. 393 ff., 1932. A brief and popular survey of the origin and diffusion of the swastika is given by W. N. Brown in a pamphlet, *The Swastika*, New York, Emerson Books, Inc., 1933.

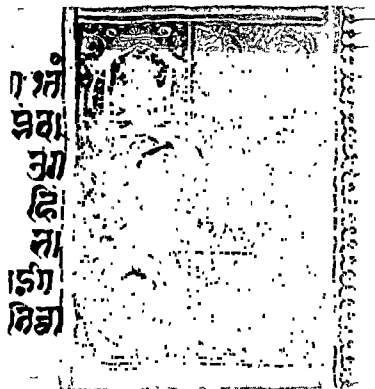


FIG 1

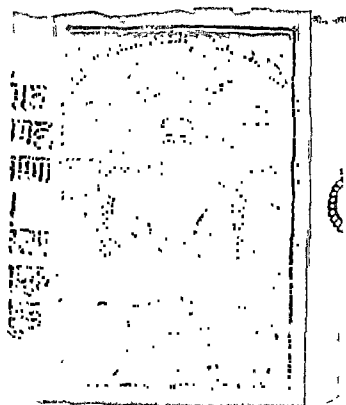


FIG 2

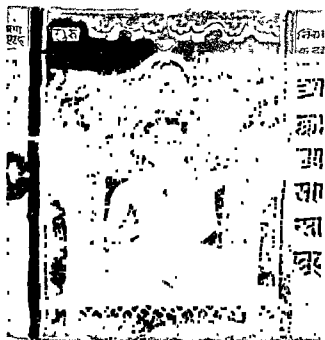


FIG 3

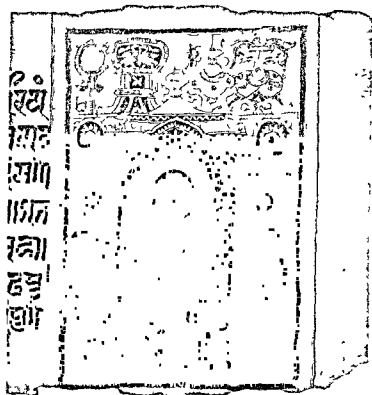


FIG 4

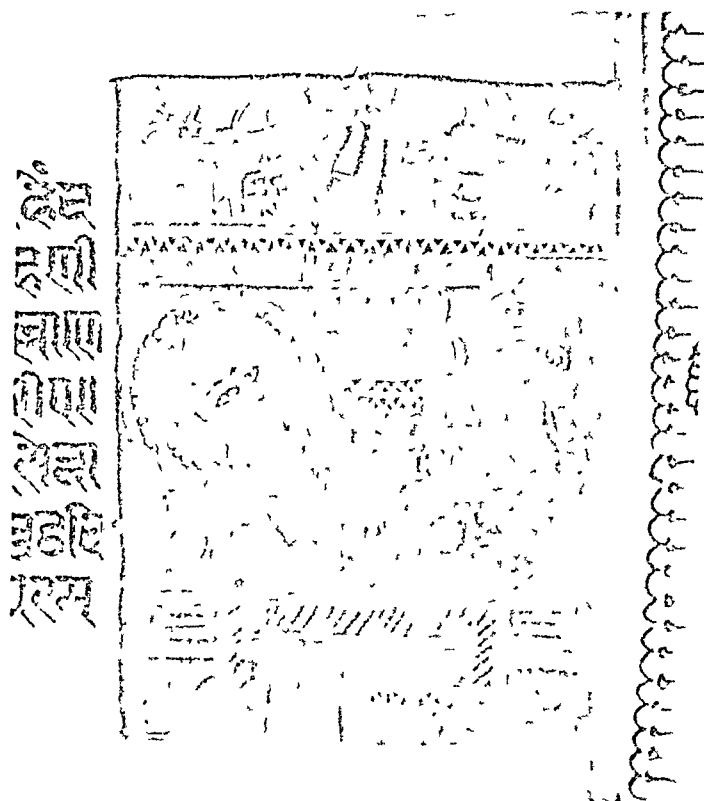


FIG 5



FIG 6



FIG 7

PLATE 2

FIG 5 Ha.4v The Brahmanī Devananda on her couch KS 3 (Jtr 219) When Mahavira descended from heaven to take form as an embryo in the womb of the Brahmanī Devananda she was lying on her couch resting fitfully now sleeping now waking

Devananda dressed in bodice (*coli*) lower garment (*dhoti*) and scarf (*dupatta*) rests upon a bed with a flowered coverlet half sitting up with the support of a bolster, left leg crossed over the right with a maid in attendance She is fully ornamented and wears a diadem in her hair behind her head is the large aureole usually accompanying female figures The maid is dressed similarly but less elaborately and also has an aureole In the maid's right hand is an object shaped like a lotus bud The bed is massive and is supported by curved legs Beneath it are two objects concerning which I am in doubt The one at the left might be a brazier (cf fig 44 or an incense burner, cf KS 32) here represented because it would be a part of the usual bedroom equipment even though the time is summer and it is not in use or it might be a footstool It is possibly the object which Hu 63 thinks is a sacrificial altar with burning butter balls The other object looks like a basket or a jar Overhead is an elaborate canopy

FIG 6 Fr 3v (cf Hu 56 ff Tafel 1 C 50 pl XI 4) Devananda and the fourteen lucky dreams KS 3 4 (Jtr 219) On the night when Mahavira descended from the Puspottara heaven to take form as an embryo in the womb of the Brāhmanī Devananda she had the fourteen auspicious great dreams namely (1) an elephant (2) a bull (3) a lion (4) the anointing of the goddess Śrī, (5) a garland (6) the moon (7) the sun (8) a banner (9) a full jar (10) a lotus lake (11) an ocean of milk (12) a celestial palace (13) a heap of jewels (14) a brilliant smokeless fire*

At the bottom of the scene lies Devananda on her couch dressed almost as in our figure 5 and in almost the same attitude although there is a slight difference in the gesture of the right hand The attendant is not represented nor the bedstead nor the canopy Above Devananda the fourteen dreams appear in three registers reading from top to bottom and from left to right in the order of the KS text Although the text specifically states that the fourth dream is the anointing (*abhiśi*) of Śrī the elephants that usually appear in the composition sprinkling her with water are not represented and the omission is common in the KS illustrations

Similar subjects are treated in our figures 18-33 a fuller statement of the dreams appears under figures 21-33

FIG 7 B17 2277 5 (cf C 45 50 54 pls IV 5 XI 8 XII 8) Śakra on throne with court KS 14 (Jtr 222 223) At the time when Mahavira took the form of an embryo in the womb of the Brahmanī Devananda the god Śakra who is chief of the 64 Jain Indras and the great deity of Jain legend was seated on his throne in the Saudharma Kalpa heaven in the celestial abode Saudharma Avatamsaka in the council hall (*śabha*) Sudharma enjoying the pleasures pertaining to his divinity namely story telling dramatic performances singing and instrumental music of lute (*śṛṅga*) and drums

Śakra is seated on his spired throne (cf under fig 3) bearing in three of his four hands the thunderbolt (*vajra* which C calls a trident) an elephant goad and a lotus bud (or possibly jewel or fruit) His scarf is elaborately patterned with swans Before him are seated three attendants gods (*devas*), each with four arms in an attitude of reverence They have attributes similar to Śakra's and are possibly meant to be some of the lesser Indras in any case the gods mentioned in the KS text

For a sculptural representation of a similar scene coming from early in the Christian era (first or second century) see Sh pl XXV Mr Shah (following Smith & A The Jain Stupa and other Antiquities of Mathura 1901) labels the scene Female dancers rejoicing at Nemesa's feat (for which feat see our figs 14 16) but it is so much like the MS paintings of Śakra on his throne with his court that I believe it should be identified as the same subject

* On dreams of B1 189 The "seventy-two dreams" are mentioned in Jacobi's *Sanatkumāracaritaṃ* (from Haribhadra's *Nemānāthacaritaṃ*) Abh. d. Bayer. akad. d. Wissen., philol. phil. u. k. Klasse vol. 31 no. 2 pp. 271, 67 1901 see also Barnett I. D. *Antagada Dasā*, p. 16 ff also Hemacandra in M 103 14 ff

PLATE 3

FIG. 8. IIa.9r (cf. under fig. 7). Śakra on throne, with court. KS 14 (Jtr 222-223). See under figure 7.

Śakra is seated on a throne of honor (*bhadrāsana*, see under fig. 4) and not in the usual spired seat with platform (figs. 7, 9). He has attributes as in figure 7: the lower right hand is closed with index finger upright. He is fully ornamented, as required according to the text, and wears garments woven in definitely indicated patterns. His right foot is folded upon the seat, his left hangs before it and rests upon a footstool. Behind him stands a male attendant with a fly-whisk (*camara*); over him and the fly-whisk bearer are two honorific parasols. Before Śakra in two registers are seven figures. The arrangement in registers does not mean that those in the upper are occupying a higher position in the room than those in the lower; it results merely in consequence of the convention that one figure in the drawing must not be set before another, and is an accompaniment of the Indian convention of vertical perspective (airplane view). In the top register are two male musicians playing drum and flute, and a female dancer. In the lower register are four male, of the court, seated on low seats or cushions probably meant to be lesser thrones than Śakra's. These are possibly the four direction-guardian (*lokapāla*) gods mentioned in KS 14, or else just four gods representing the entire court, for Śakra is described in the passage as the chief of all the gods. The painting has a legend *indrasabhānāṭaka*, "entertainment in the court of Indra."

FIG. 9. Fr.9r (cf. Hu 60; C 46, 50, 54, pls. IV.6, XI.10, XVI.12). Śakra reverence- Mahāvīra's embryo. KS 15-16 (Jtr 223-225). Śakra, by the power of his *araṇhi* (all-seeing) knowledge, saw that Mahāvīra had descended to the earth. He left his throne, took off his bejewelled shoes, arranged his garments,⁷ folded his hands in a gesture of worship, advanced seven or eight steps towards the Tirthankara, bent his left knee and rested upon the right, touched the earth with his head three times, joined his hands and put them to his head, and then, after addressing all the holy beings, spoke in praise (*śakrastava*) to Mahāvīra.

At the right is Śakra kneeling with hands held before him in worship, and behind him is his spired seat from which he has stepped forth. Above him is his honorific parasol. Clouds appear at the top of the picture. The wall painting inside the spire is clearly shown. Śakra appears to be kneeling on a brick platform.

FIG. 10. B17.2276,9 (cf. C 42, pl. I.9). Śakra reverences Mahāvīra's embryo. KS 15-16 (Jtr 223-225). See under figure 8.

In this representation Mahāvīra appears, although not as an embryo but as a god in the Puṣpottara heaven (cf. fig. 2). The detail is less elaborate than in figure 1. Beside Mahāvīra's head are two swans holding lotuses. Śakra is not kneeling, as related in the KS text, but is standing in worship. At his feet is his elephant Airāvata.

⁷ This would normally mean that he wrapped his upper garment over his mouth; the term is *uttarāsāṅga*, but our painting does not show this.

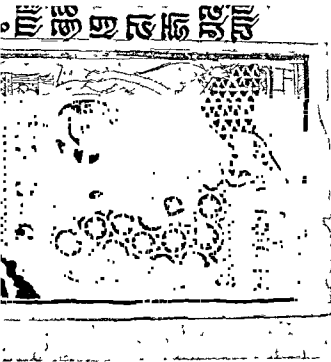


FIG 9



FIG 10



PLATE 4

FIG 11 Ha 16r (cf Hu 61) Śakra commands Harina gamesin KS 17 27 (Jtr 225 227) Śakra reflecting that in all periods Tirthankaras are born only in families of the ruling caste (Ksatriya) and never in those of the priestly caste (Brahmana) decides that he must have the embryo in the Brahmani Devananda's womb exchanged for that in the womb of the Ksatriyani Trisala wife of King Siddhartha of the Kasyapa gotra. He summons Harina gamesin commander of his infantry and instructs him to make the exchange. *Harina gamesin indicates obedience*

At the left is Śakra seated on his throne. Facing him at the right is Harina gamesin with hands in a gesture of obedience.

Harina gamesin is represented in the paintings as a being with a human body and the head of either a horse or an antelope. In this illustration and in our next (fig 12) the head is that of a horse in figures 14 15 and 16 the head has antelope's horns.

Naigamesa the short form of the name Harina gamesin is the name of a Yakṣa known from the time of the Atharva Veda where he appears as a ram-headed creature—elsewhere with a horse's head. With the name Naigamesa should be connected the name Naigameya applied to the war god Skanda. So too the vehicle of Harina gamesin is the peacock (see our fig 15) which is also that of Skanda. In various ways connections are indicated between Harina gamesin and Cāgā mukha Agnī mukha Sanatkumara (=Skanda Chand Up VII 262) Susena (Ram IV 22 42 VII 2) Manibhadra the Buddha Sankusumita Pradyumna and Pañcasikha. Harina gamesin is a composite figure the son of a great deity who becomes the leader of the army of some god or of the gods and at the same time is associated with the procreation of children and the use of herbs. In our story he functions both as a general and as deity of procreation.

For the literature on Harina gamesin see Winternitz M. Journ Roy Asiatic Soc pp 149 ff 1893 Hopkins C W. Epic Mythology pp 119 228 ff Keith A B. Religion and Philosophy of the Veda p 242 Mukhopadhyaya Indian Hist Quart vol 7 pp 309 318 Epigraphia Indica II 314 ff Barnett L D. The Antagadadasao p 67 Smith V A. The Jain Stupa of Mathura pl XVII Lalou L. Iconographie des étoffes peintes (pata) dans le Manjusrīmulakalpa pp 66 70 Coomaraswamy A K. Yakṣas pt I pp 10 12 Sh p 21. Four very early sculptural representations of Harina gamesin and a female counterpart from Kushana times are reproduced in Sh pl XXVI. (The exchange episode in our story recalls the Krishna infancy legends.)

FIG 12 B22 364 18 (cf C 54 pl XVI 18) Śakra commands Harina gamesin KS 17 7 (Jtr 225 227). See under figure 11.

The scene differs from that of figure 11 chiefly in representing Harina gamesin twice: once in the lower register receiving Śakra's commands and once in the upper register leaving to execute them.

FIG 13 Hg 16v Śakra's command. Presumably KS 17 27 (Jtr 225 227). See under figure 11.

This painting bears the legend *indra adesa* Indra's command and appears in the text opposite KS 24 25 but I have not seen another painting like it and I cannot explain it. It is in two registers. In the upper register is a triple walled enclosure like those used for a Tirthankara's *sama asarana* (see figs 80 99 113 126) inside of which sits a woman. In the lower register at the left is a wall or pile of bricks or brick kiln (see Br figs 29 37) above which is seated a creature with human body and the head of an animal possibly a lion. In the center is a river (? cf figure 88) at the right are two tiers of three males each the left hand one in the top row appearing to have four arms.

FIG 14 Fr 14v (cf Hu 62 C 46 54 pls V 10 XVI 20) Harina gamesin removes the embryo from Devananda's womb KS 27 28 (Jtr 227 228). Harina gamesin miraculously went to the continent of Jambudvīpa to Bharatavarṣa (India) to the village of Kunlagrāma bowed to Mahāvīra cast Devananda and her attendants into a deep sleep and saying: May the Venerable One permit me to take out the embryo from Devananda's womb.

Devananda is lying on her bed as in figures 5 and 6 with her eyes wide open although she is supposed to be asleep—in this art eyes are regularly represented open no matter what the circum-

stances. At the right is Hariṇaigameṣin leaving with the embryo. Overhead is an elaborate canopy, and above that the top of the house, which has three peaks. Peacocks, parrots, and swans fill in the composition. Below the bed are three objects (cf. fig. 5), the middle one of which is a water vessel. The others are like those in figure 5, for which I suggest tentatively a brazier (or incense stand; cf. KS 32) and a basket (or jar).

In Sh pl. IV is pictured a Kushana sculpture from Mathura labelled by Mr. Shah as "transfer of Mahāvīra's embryo by Naigameṣa".

PLATE 5

FIG. 15 Ilc.21v Harinaigamesin carrying the embryo. KS 28 (Jtr 228). Harinaigamesin, carrying the embryo, went from the part of Kundagrāma where the Brahmans dwelt to the part where the Ksatriyas dwelt, to the home of Siddhārtha and Triśalā.

Harinaigamesin is striding along with great vigor, holding in his left hand the foetus. Below his feet is a peacock, apparently his vehicle.

FIG. 16 Fr.15r (cf. Hu 62 f., fig. 3. C 42, 46, 54, pls. I.15, V.11, XVI.20). Harinaigamesin brings the embryo to Queen Triśalā. KS 28 (Jtr 228). Bringing the embryo of Mahāvira to the home of King Siddhārtha and Queen Triśalā, Harinaigamesin cast the queen and her retinue into a deep sleep, and then placed the embryo that had been in the womb of the Brāhmanī Devānandā in the womb of the Ksatriyānī Triśalā, and the embryo that had been in the womb of Triśalā he put in the womb of Devānandā.

The scene is much like that of figure 14, but less elaborate in detail. Harinaigamesin is approaching Triśalā. The top part of the room (or house) is less complicated than in figure 14 and there are only two objects under the bed.

FIG. 17 Ilb.23v (cf. Hu 63, Tafel I: C 46, 54, pls. V.12, XVI.23). Triśalā on her couch. KS 31-32 (Jtr 229-230). On the night when the embryo was transferred the Ksatriyānī Triśalā was sleeping fitfully in her beautifully ornamented room, lying upon a highly decorated couch; and at that time she saw the fourteen lucky dreams.

The treatment is essentially like that of the Brāhmanī Devānandā asleep in our figure 5. The upper part of the picture, showing the entablature of the house, is beautifully ornamented with a full vase and two pairs of peacocks with intertwined necks.

In the KS text the description of Triśalā's room and bed is detailed, whereas no description was given of Devānandā's room and bed.

In the corresponding illustration of the Berlin MS. (Hu 63) the sun and moon appear above the bed, and flowers fall from heaven (or perhaps the flowers are meant only to fill in the composition; cf. remark under our fig. 73, p. 34).

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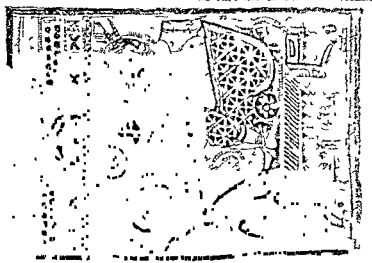


Fig. 17

Fig. 16

नलद्विषायासमगपवसुसुमवद्वसदागा
मयारकलियाउद्वहावतकालसमदासि
जायगद्विषागीग अयासदा
पमयालकावमगद्वसमदासि
गायवसद्वानातागासातिसलायसिदा
गीतायलमयागपमगद्वसमदासि

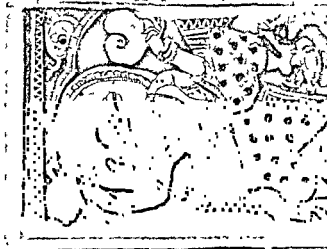




FIG. 18

विमलाक्षः
७



FIG. 19



FIG. 20



FIG. 21

PLATE 6

FIG 18 Fr 18r (cf C 50 pl VI 1) Trisālī and the fourteen lucky dreams KS 31 46 (Jtr 229-238) Trisālī sleeping fitfully saw the fourteen lucky dreams that Devānanda had previously seen. These dreams appear to the mother of every Tīrthankara on the night when the future Savior enters her womb.

In composition and detail the treatment is almost exactly like that of Devānanda seeing the fourteen lucky dreams (fig 6). Trisālī's aureole is slightly more elaborate than that of Devānanda.

In the KS text the dreams are at this point described in detail (cf also in Jo 100 f). See also under our figures 21-33. Omitting most of the detail we find (1) the elephant is white and has four tusks (the painting shows only two) (2) the bull is white (3) the lion is white and playful (notice his jaunty manner in fig 6) (4) the goddess Śrī on top of the Himalaya mountains seated on a lotus in a lotus lake is being sprinkled by elephants (not shown in the painting) and she has all the standard marks of beauty such as a large and beautiful abdomen adorned with a circular navel and a lovely row of black hair and three dimples while her waist could be spanned with one hand she sprinkles about the juice from two lotuses (5) the garland is composed of a variety of flowers (6) the moon is full * (7) the sun is red (8) the banner is fastened to a golden staff with a tuft of peacock's feathers (9) the full vessel is of gold contains water has all the auspicious marks stands upon a lotus base and is entwined with flowers (10) the water of the lotus lake is yellow (11) the ocean is the Ocean of Milk constantly in motion and is filled with all sorts of marine monsters (represented here but not in fig 6) (12) the celestial palace is dazzling has 1008 columns is decorated with pictures and is filled with music made by the Gandharvas (13) the jewel heap extends from earth up to the heavens and illumines the sky (14) the fire is smokeless.

FIG 19 B17 2277 13 (cf Hu 56 fig 2 C 47 46 pls I 34 V 13) The fourteen lucky dreams of Trisālī KS 33 46 (Jtr 231-238). See under figure 18.

The fourteen lucky dreams without Trisālī in the composition. For the dreams see under figures 18 and 21-33.

FIG 20 Ha, 27v (cf C 54 pl VIII 34) The goddess Śrī one of the fourteen lucky dreams KS 36 (Jtr 232-233). As the fourth of the lucky dreams the goddess Śrī is presented alone. For her see under figure 24.

The goddess is seated in a spired seat of honor facing straight forward. She is four armed and in the upper hands carries the two lotuses mentioned in the KS text. Again the elephants are missing. She is dressed in bodice lower garment and scarf wears full ornaments and on her forehead carries the usual spot (*tīlaka*). Swans and parrots are on the roof of the building.

In the Boston example (C 54 pl VII 34) the composition has still more detail. There is an elephant under the throne and peacocks are in the upper corners.

FIG 21 Hg 23v The elephant KS 33 (Jtr 231). The first of Trisālī's fourteen dreams was an elephant. It was large and beautiful possessing all the lucky marks * white with four tusks its forehead streaming with ichor an animal equal to Indra's elephant.

On a blue background amid vegetation ornament is the elephant. It is fully caparisoned like a state elephant. Its white color is represented by gold. Of the four tusks mentioned in the text two are represented by tips appearing below the usual tusks.

* So stated in the text although in the painting it appears to be a crescent but for explanation see under figure 26.

* See in Edgerton P. The Elephant Lore of the Hindus pp. 54 ff. New Haven 1931 Jo 188 f.

PLATE 7

FIG. 22. Hg,25r. The bull. KS 34 (Jtr 231). The second dream was a white bull surrounded by a diffusion of light, with a charming hump. Its beautiful horns were greased at the tips.

FIG. 23. Hg,25v. The lion. KS 35 (Jtr 231-232). The third dream was a sportive lion, whiter than pearls, beautiful in every respect, with flapping tail and with tongue protruding from its mouth.

Presumably the object extending from the lion's mouth is the protruding tongue mentioned in the text.

FIG. 24. Hg,26r. The goddess Śrī. KS 36 (Jtr 232-233). The fourth dream was the goddess Śrī (see under fig. 20).

This painting has many similarities to that of figure 20, although the goddess is not seated in a spired seat. Her lotus rises from the lotus lake on top of the Himalaya mountains mentioned in the text. Her upper right hand holds an axe; the lower is in *varada* (gift) gesture. The upper left hand holds a lotus, the lower is not certain.

FIG. 25. Hg,27v. The garland. KS 37 (Jtr 233-234). The text describes the various kinds of flowers that made up the garland.

In the painting the garland hangs down with a lotus supporting it. On each side is a streamer.



FIG. 22



FIG. 23

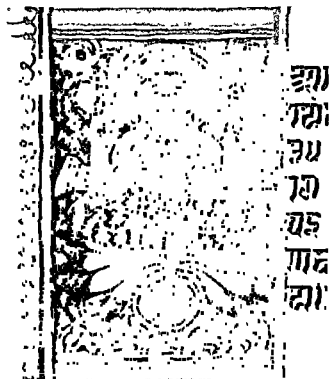


FIG. 24

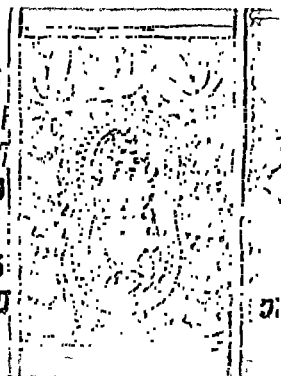


FIG. 25



FIG. 26

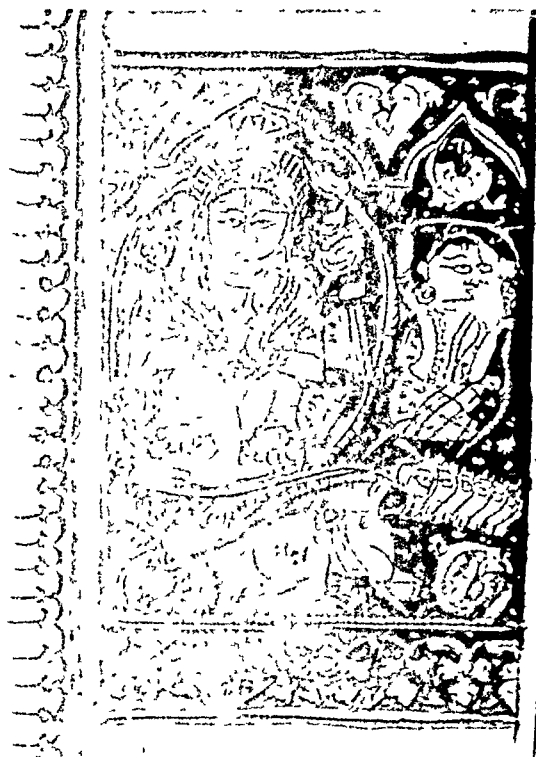


FIG. 27

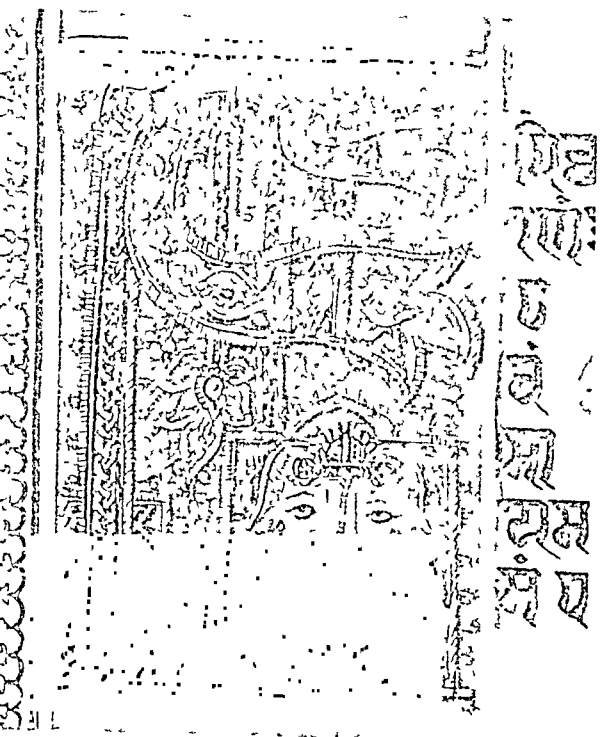


FIG. 28



FIG. 29

PLATE 8

FIG 26 Hg,28v The moon KS 38 (Jtr 234 235) The sixth dream was the full moon

On a stand is the moon, looking like a crescent but actually full. The apparently vacant space is the part reserved for the deer which the Indians profess to see in the moon (*mrgāṅka* sometimes they see a hare, *śaśaṅka*), for a similar representation in metal see Jo plate III. Clouds are overhead.

FIG 27 Hg,29r The sun KS 39 (Jtr 235) The seventh dream was the red sun

In our painting the sun is anthropomorphic, seated on his chariot with legs crossed and hanging down in front. His roundness is indicated by a circle about his figure. He is riding in the seven-horsed chariot commonly indicated for him in Hindu sculpture, driven by his charioteer Aruna (Dawn).

FIG 28 Hg 30r The banner and the full vase KS 40 41 (Jtr 235 236) The eighth and ninth dreams were respectively a wondrous and beautiful banner fastened to a golden staff, with a lion at the top, and a full vase filled with water and lotuses, the abode of Fortune.

In the painting we have a large banner and a small one, neither bearing the lion of our text. The vase is set in its own frame.

FIG 29 Hg 31v The lotus lake KS 42 (Jtr 236) The tenth dream was a large lake full of lotuses swarming with bees, with aquatic birds standing beside the lake.

In the painting the lake is full of fish and lotuses. It has two tiers of steps, with four gateways or openings. The birds appear in the gates.



FIG 72



FIG 73

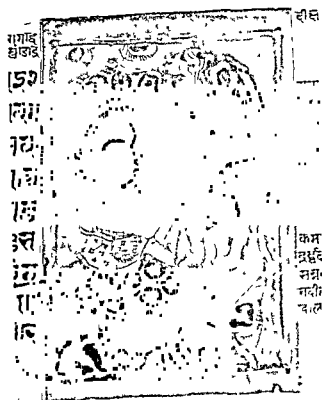


FIG 74

the forest, which was bare and desolate, full of dried up and twisted trees, piles of dead leaves, and ant hills, and came to an old leaf hut. There he engaged in meditation. The serpent saw him, and breathed out his deadliest looks and most fatal blasts, but they had no effect. Then he bit the master's feet, but again fruitlessly. All his poison was as nectar. Then the master spoke, "Awake, awake!" At these words the serpent recalled its previous existences and repented. On the spot it gave up violence. Soon the cowherds came, and great was their astonishment. Presently along came vendors of ghee (melted and clarified butter) and they dropped ghee on the serpent. Ants, attracted by the odor, came to eat it. The serpent never moved, and when the ants finished with him, he looked like a sieve (*titaï*). After a fortnight's agony the serpent died and went to heaven.

Our painting shows the desolate forest with its bare trees. The serpent is just in the act of biting Mahāvīra's feet. Under the tree is a red object, possibly meant for an ant hill. Mahāvīra stands undisturbed in meditation.

FIG. 76. Hg.73v. Mahāvīra's austerities (continued). KS 117-119 (Jtr 259-262); cf. AS 2.15.23-24 (Jtr 200-201). See under the preceding figure.

The painting is in three registers, but I believe shows four scenes, two being on the bottom register.

(a), (b), (c) Three of Saṃgamaka's attacks upon Mahāvīra, being part of the 20 attacks upon Mahāvīra's meditation made by the jealous god Saṃgamaka (M 10.4.160-318). This god, hearing Śakra praise Mahāvīra for fortitude in meditation, sets out to interrupt it; and attacks him with a dust storm, ants, gnats, *ghṛtelikā* (roaches?), scorpions, mongooses, snakes, mice, an elephant, a she-elephant, a demon (*piśāca*), a tiger, dissuasion by his father and mother from the quest, a vessel of food at his feet, fire at his feet, an outcast (*caṇḍāla*) who set cages of birds over Mahāvīra's body to peck it, a burning wind, a *kālacakra* weapon; then attractive temptations, such as the music of birds. He tells Mahāvīra he is a god who has been tempting him and he now offers heaven as a reward; finally he shows beautiful women. The trials last six months, but Mahāvīra stands unheeding. When Mahāvīra finishes his meditation and goes to break his fast, Saṃgamaka interferes by having improper food offered.

In the top register is the temptation by women. This gets the most elaborate treatment in Hemacandra (M 10.4.257-280). A heavenly woman dances beside a stream, while Mahāvīra stands unnoticing.

In the middle register the subject is perhaps doubtful. It is possibly Saṃgamaka appearing as a god (M 10.4.248-253); he has four arms but is without attributes (cf. fig. 120 from same MS.). If the subject is Saṃgamaka as a god, specifically Śakra, the cow (assuming it is not a bull) before him would probably be Kāmaduh, the wishcow that grants whatever it is asked. Saṃgamaka tells Mahāvīra in the text that he shall have all his desires, but there is no mention of the cow.

An alternative explanation of the painting might be that it is Śakra prophesying the 12 years of austerities Mahāvīra is destined to endure (see p. 54); the cow would then be a bull. See under figure 75a. The objection to this interpretation is that it puts the scene far out of order.

In the bottom register are two scenes. At the left stands Mahāvīra in strict meditation. Beside him kneels a male (Saṃgamaka?), who seems to be doing something with an object at Mahāvīra's feet, while with the other hand he strokes Mahāvīra. If it is Saṃgamaka, the object might be the fireplace and fire Saṃgamaka lighted, and the vessel of food he respectfully offered at Mahāvīra's feet; the fire burnt Mahāvīra severely (M 10.4.226-227). An alternative interpretation might take this to represent part of the story depicted in the other section of this bottom register, and would show the shampooing of Mahāvīra's body.

The last scene is part of the story of the cowherd who drove the spikes in Mahāvīra's ears, which will be given in detail under the next painting. Here we have Siddhārtha and Kharaka standing beside Mahāvīra.

FIG. 77. Fr.51v (cf. Hū 70, fig. 10; C 51, pl. XII.60). Mahāvīra's austerities. KS 117-119 (Jtr 259-262); cf. AS 2.15.23-24 (Jtr 200-201). Cf. under figure 75. The story chiefly illustrated in this painting is that of Mahāvīra and the cowherd who drove the spikes in his ears (M 10.4.618-649).

ILLUSTRATIONS AND DESCRIPTIONS

When Mahavira had come almost to the end of his quest he was in a forest engaged in ascetic meditation. Certain *tedanlya* (sensation) karma which he had accumulated in a previous existence by pouring melted tin into another person's ears had come to the point of ripening. His victim had been reborn as a cowherd who had at this time let his bulls loose outside the village while he went to milk the cows (cf. motivation of scene in fig. 75a). The bulls wandered away. The cowherd came seeking them and chanced upon Mahavira. He asked if he had seen the bulls but Mahavira was too deeply absorbed in meditation to hear him. 'Sir where are my bulls? Why don't you answer me you monkling? Don't you hear? Or are your earholes useless?' When Mahavira still did not reply the cowherd in a blind fury took two spikes and drove them into the Master's ears until they met inside his head and became one. Then he cut off the protruding ends so that no one might see them and draw them out and left.

When Mahavira had finished his meditation he went to a nearby village and entered the house of a merchant named Siddhartha to break his fast. A physician named Kharaka was there, who by his unusual insight recognized Mahavira's true character and acclaimed him for his fortitude in carrying arrows in his body. Siddhartha was doubtful but Kharaka pointed out the spikes in Mahavira's ears. While the two were discussing the matter Mahavira went outside the village to a grove, where he engaged in *pratyak* meditation (*subhathita sukladhyana*). Siddhartha and Kharaka hastened after him with useful appurtenances. They bathed Mahavira with a vessel (*dronti*) of oil and had powerful shamsoors rub him. Under the shampooing Mahavira's joints were all loosened and with them the spikes fell apart inside his head like a pair of tongs coming open and out they dropped from his earholes covered with blood. At the same time the *tedanlya* karma came out. The pain was so great that Mahavira emitted a mighty cry like that of a mountain struck by a thunderbolt which would have burst the earth had not the Master taken care to save it. Siddhartha and Kharaka asked and received forgiveness for causing Mahavira pain and went home. Although they had caused him pain they had acted with good intentions and in return were reborn in heaven as gods. The cowherd was reborn in the seventh hell.

The painting combines several episodes from Mahavira's numerous trials (*upasarga*) as described under figures 75 and 76. He is standing between two trees which represent the forests or groves where the various events took place. The lion (or tiger) and the bird are some of the trials inflicted by Sangamaka. (See under fig. 76.) Two male figures stand beside Mahavira, the one on the left presumably being the physician Kharaka who is pulling oil out of a receptacle the other, in an attitude of reverence, presumably being Siddhartha.

In variants snakes are coiled about Mahavira, scorpions attack him, insects fly about his head. (See under fig. 76.)

PLATE 23

FIG. 78. IIa.74r (cf. IIü 70, fig. 10; C 51, pl. XII.60). Mahāvīra's austerities. KS 117-119 (Jtr 259-262). See under figures 75-77.

Mahāvīra is represented three times. In the upper register he is attended by Kharaka and Siddhārtha, who hold the spikes that have come out of his earholes. In the lower register he is seen at the left between two arched trees, and this time with two lions (or tigers) raging at his feet, which he does not notice. At the right he stands between two jars (perhaps of the oil used for shampooing him or the vessel of food Saṅgamaka offered him), while birds roost unnoticed on his ears and peck at his head.

FIG. 79. IIa.78r. Mahāvīra's omniscience. KS 120 (Jtr 263). During the thirteenth year of austerity, on the tenth day of the light fortnight of the month Vaiśākha, outside the town Jṛmbhikagrāma, not far from an old temple, in a field under a sāl tree, Mahāvīra, squatting on his heels, reached the highest knowledge.

Our picture shows him in the squatting position, but the temple and the tree are missing. Overhead is a canopy, while beside Mahāvīra is a worshipping male, who may not unreasonably be taken for Śakra in spite of the fact that the text does not mention him (nor does the AS 2.15.27, Jtr 202); for the text does say that on the night Mahāvīra obtained perfect knowledge, the gods descended from heaven and ascended, and they are doubtless here symbolized by a single representative, who would normally be their leader Śakra. Hemacandra (M 10.5.5) says that the Indras came accompanied by the gods.

FIG. 80. Fr.54v (cf. IIu 74-75, fig. 12; C 28-29, 43, 47, 51, 55, pls. 11.53, VII.37, XIII.64, XVIII.71). Mahāvīra's *samaśaraṇa*. Implied in KS 120-121 (Jtr 263-264). When a Jina obtains perfect knowledge, the gods prepare his *samaśaraṇa*. The earth is cleansed for a space a *yojana* around, scented, and ornamented. Three walls are erected, the innermost of jewels, the middle of gold, and the outermost of silver. There are four jewelled gates to each wall. In the center is a pedestal with a tree, and under the tree are four lion thrones. The throne on the east is occupied by the Jina; the three others by reproductions of him. There he preaches to gods, men, and animals. The *samaśaraṇa* may be either round, as here, or square, as in figure 99. Cf. Bhandarkar, in *Indian Antiquary* 40.125-130, 153-161; Jo 190-194.

In the painting Mahāvīra sits within the *samaśaraṇa*, with two Yakṣas as attendants. He is not in monk's garb, but is in the ornamented array common to a perfected being (Siddha); cf. figure 81.

Subjects similar to this are presented in figures 99, 113, 126.

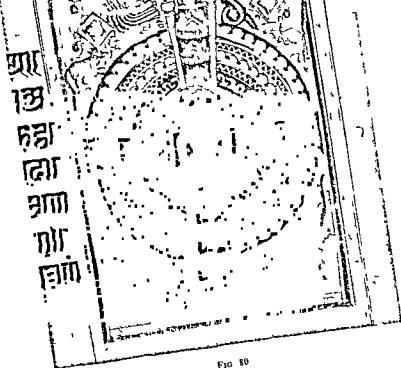


FIG 80

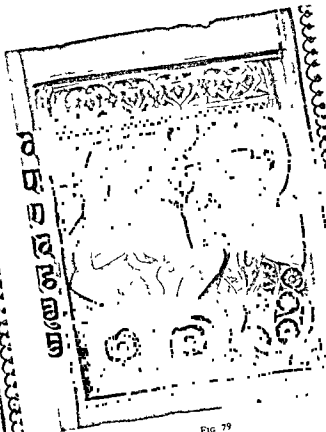


FIG 79



FIG. 81



FIG. 82

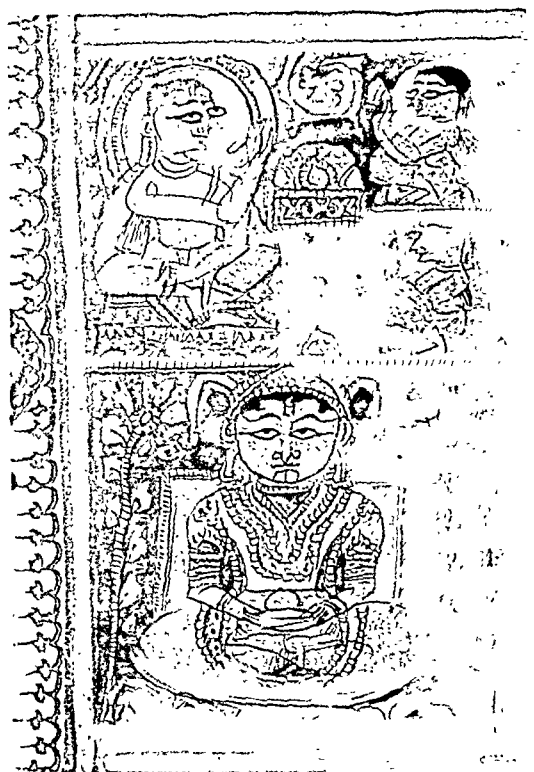


FIG. 83

PLATE 24

FIG 81 Fr 56r (cf Sh pl V Hu 74 75 fig 12 C 26 43 47 51 56 pls III 55 VII 38 VIII 66 VIII 73) Mahāvira as a Siddha (liberated soul) K.S. 123 124 (Jtr 264 265) On death a liberated soul goes to the Siddhasila or Isatpragbhāra (see Kurfel 301 302) which is at the top of the universe. This resembles an inverted white parasol being made of pure white gold 4 500 000 *yojanas* long and as many wide eight *yojanas* thick at the middle but tapering off till at the edges it is thinner than a fly's wing. All varieties of Siddhas (perfected beings) go there after death of these the Tirthankaras are the foremost. There the released souls dwell in omniscience and omniscience perfectly blissful.

Mahāvira fully ornamented as in figure 2 sits on a throne hands in lap one above the other palm upwards. Over his head is a peculiar kind of floral ornament which looks like part of the headdress but in origin seems to have been free from it (see in the oldest published miniatures of this style Br 116 pls 1 3). Above is a highly conventionalized parasol. A lion on the cognizance of Mahāvira is probably intended by the lines in the center of the throne pedestal. Below Mahāvira is the thin crescent representing the Isatpragbhāra and beneath it are mountain peaks. At the sides of the painting are trees which bend above the Tirthankara.

Sh pl V wrongly identifies the scene as Mahāvira's omniscience (for which see fig 79).

Similar subjects appear in figures 100 114 128.

FIG 82 Ha 82r Indrabhūti Gautama's omniscience K.S. 127 (Jtr 265 266) On the night when Mahāvira died his eldest disciple Indrabhūti of the Gautama family by realizing that affection was out of place even when directed toward his master finally overcame all the bonds and won perfect knowledge.

The miniature shows Indrabhūti framed like a temple image in its niche. He is dressed in the robes of a Svetāmbhara monk the whiteness being indicated by crisscrossed white lines and dots on a gold background. His right shoulder is bare but over it is a narrow white object probably his mouth cloth. Under the left arm is his broom. The left hand rests upon his lap the right is raised in a teaching gesture. He sits upon an open plant perhaps a lotus. The painting has a legend *gautama jñāna* omniscience of Gautama.

FIG 83 Hg 76v (a) Indrabhūti Gautama's omniscience (b) Mahāvira as a Siddha K.S. 123 124 127 (Jtr 264 266) See under figures 81 82.

The representation of Mahāvira as a Siddha presents no difficulties but that of Gautama in the upper register is puzzling. The legend of the painting is *gautama jñāna* 'Gautama's omniscience' but the representation is unusual. A monk sits on a throne preaching to two nuns (the sex is indicated by the robes which extend up behind the neck to the head). Before the monk is his *sthāpanācārya* (substitute for his spiritual preceptor in the latter's absence). This does not as far as I know fit in with the story of Gautama's omniscience. He had been sent by Mahāvira to awaken Devaśarman.

PLATE 25

FIG 84 Ha,82v. The festival of lights. KS 128 (Jtr 266). On the night when Mahāvīra died, the 18 confederated kings instituted an illumination on the Poṣadha, which was a fast day. They said, " Since the light of holy knowledge is gone, let us make a material illumination ! "

Under a canopy are three males, probably typifying the 18 kings, holding torches. The scene bears the legend *dīpālī* (festival of lights), and Jacobi (Jtr 266n) says that the Jains celebrate the nirvāna of Mahāvīra with a festival of lights on the new moon of the month Kārttika.

FIG 85 Ha,84v. Mahāvīra with his community KS 134-137 (Jtr 267-268). When Mahāvīra died, he left a congregation of 14,000 monks headed by Indrabhūti, 36,000 nuns headed by Candanā, 159,000 laymen headed by Saṅkhaśataka, 318,000 lay women headed by Sulasā and Revatī.

Our painting, which bears the legend *vīra parivāra āgre* and faces KS 136-137, may reasonably be interpreted as depicting Mahāvīra seated on a throne within a shrine, holding his mouth cloth and broom, faced on the lower tier (so as to be at the Master's right) by Indrabhūti, as head of the monks, and on the upper tier by Saṅkhaśataka, as head of the laymen.

FIG 86. Ha 85r Mahāvīra preaching to monks and nuns. KS 138-145 (Jtr 268). The text categorizes the monk and nun followers of Mahāvīra under heads according to their various religious achievements and qualities.

In the upper register is seated Mahāvīra, before him stand two figures, the one in front having the robe up behind the neck and head, indicating that the figure is female; the one in the rear being a male. On the lower register Mahāvīra appears again, holding his mouth cloth while he preaches, addressing a monk who is possibly Indrabhūti, head of the order after Mahāvīra's death. Between them is a stand (*sthāpanācārya*) like those used today by monks to support the symbol of the master which a monk must always have before him when he engages in religious exercise without his spiritual master's presence.

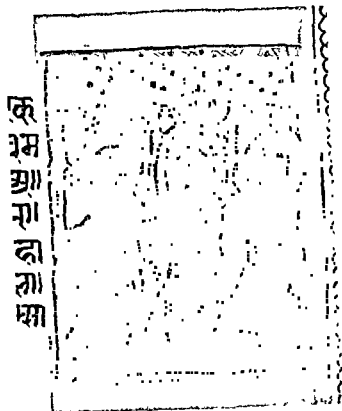


FIG 34



FIG 35



FIG 36

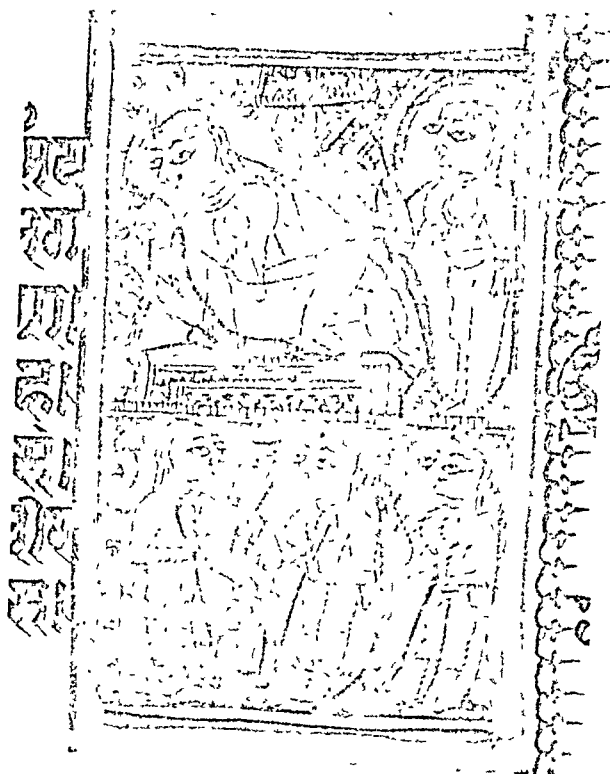


FIG. 89



FIG. 87



FIG. 88

PLATE 6

FIG 87 Ha 88v (cf pl I Ha 71 77 fig 11 Gl pl 29 C 43 48 51 56 pls III 59 VII 41 XII 72 XII 89) Pūrva in the Prānākalpa heaven KS 150 (Jtr 271) Before being born Pūrva the twenty third Tīrthāṅkara had lived for 20 *adgaropamas* (an incredible period of time cf Kufel 339) in the Prānākalpa heaven Thence in the middle of the night when the moon was in conjunction with the asterism Viśākhā he took the form of an embryo in the womb of Vāmī wife of King Aśvasena of Benares

The treatment is closely analogous to the treatment of Mahāvīra in the Puṣpottara heaven before being born on earth (See fig 2) The variations in detail need no comment with the exception of the seven headed serpent that shelters Pūrva and regularly appears with him. So too on the pedestal below Pūrva is probably his cognizance a serpent but the drawing is not clear

The serpent is intimately connected with the legend of Pūrva (see Bl CP) Many existences before two brothers had lived one with the seed of righteousness in his soul the other with the seed of evil, which led him to kill the first brother The two were reborn nine times and in four of the rebirths the wicked one killed the righteous In four of the others the righteous was reborn in a heaven in three of them the wicked one was reborn in a hell In the ninth existence of the wicked soul it was embodied in a Brahman boy who became an ascetic Kamatha At the same time the righteous soul was embodied in Prince Pūrva One day Pūrva saw Kamatha in a park outside the city engaged in the penance of five fires that is with four fires around him while the sun beat down from overhead By his superior knowledge Pūrva perceived that a log in one of Kamatha's fires contained a family of snakes imprisoned Over Kamatha's remonstrance Pūrva had his servants split the log from which the snakes then emerged The people applauded but Kamatha was angered (so in CP 353 but differently in Pl 113 f) Some time later Pūrva saw a picture of the preceding Tīrthāṅkara named Aristanemi and inspired by it forsook the worldly life to enter upon the struggle for perfect knowledge While he was engaged in austerities the wicked soul of Kamatha now reborn as the Asura Meghamālin (whose name means 'garlanded with clouds'), under the influence of the rage he had felt when Pūrva showed superior knowledge concerning the snakes attacked Pūrva with wild animals and a fierce storm But the serpent which Pūrva had rescued now reborn as Dharana (or Dharavendra) lord of the Nagas in the under world came and spread his seven hoods over Pūrva's head as shelter Dharana then lectured the Asura on his wickedness and ingratitude toward Pūrva who had saved him from unwitting sin The Asura repented and determined to lead a righteous life Pūrva obtained omniscience

Similar subjects to that of this painting appear in our figures 2 101 102 116

FIG 88 Ha 89r King Aśvasena and Queen Vāmī in Benares KS 150 (Jtr 271) The parents of Pūrva were King Aśvasena and Queen Vāmī of Benares

The painting shows a porch with a male figure seated upon a cushion He is evidently King Aśvasena and the scene is meant to be familiar for he does not carry the sword which is a king's attribute on public occasions Before him stands another figure apparently meant for Queen Vāmī although it has all the signs of being masculine It has the U shaped forehead mark that pertains to males and only one breast is drawn with fullness at the same time the bodice of the female costume is lacking (See Introduction p 2) Except for the legend *vāndrasi aśvasena vāmadevi* (Aśvasena and Queen Vāmī in Benares) I should not have identified the scene thus and as it is in making the identification I must allow for errors on the part of the artist* Around two sides of the scene flows the river Ganges Water is indicated by the frequently employed crossed lines and here fish are also represented In the lower right hand corner is a swan

FIG 89 Hg 78v Two scenes in one (a) Vāmī conceives Pūrva (1) three nuns Implicit in KS 150 (Jtr 271) explicit in CP 332 352 where it is stated that at the time of conception Vāmī saw a serpent crawling by her side (*pūrva*) This was thought to be a sky serpent come to be the embryo The serpent is Pūrva's cognizance

In the upper part of the painting Vāmī lies somewhat uncomfortably upon a short bed and the serpent is beside her

In the lower half of the painting three nuns are in conversation

PLATE 27

FIG. 90. Fr.62r. Two scenes in one: (a) Pārśva's birth; (b) Pārśva's lustration and bath at birth. KS 152-154 (Jtr 272). See description of corresponding events in life of Mahāvīra under figures 58, 61.

Similar subjects appear elsewhere among our illustrations; see under figures 58, 61.

In a Kalpasūtra manuscript belonging to II. Kevorkian a painting corresponding to this shows Pārśva at birth standing upright in his mother's arms, with a crown above his head.

FIG. 91. Hb.81v. Two scenes in one: (a) Pārśva's birth; (b) Pārśva gives away his possessions. KS 152-157 (Jtr 272). See description of corresponding events in the life of Mahāvīra under figures 58, 70.

For lists of paintings presenting similar subjects see under figures 58, 70.

FIG. 92. Hg.82v. The five auspicious events in Pārśva's life. KS 149 (Jtr 271). The five auspicious events of Pārśva's life occurred when the moon was in conjunction with the asterism Viśākhā.

The painting has the legend *pārśvapañcakalyāṇaka*, "Pārśva's five auspicious events." They are: (1) descent from heaven and conception; (2) birth; (3) forsaking world and tearing out of hair; (4) omniscience, here represented by the *samavasarāṇa*, in which he preaches his first sermon; (5) liberation. Cf. figure 1.



FIG 92



FIG 90

श्री भक्तिजन्म



FIG 91

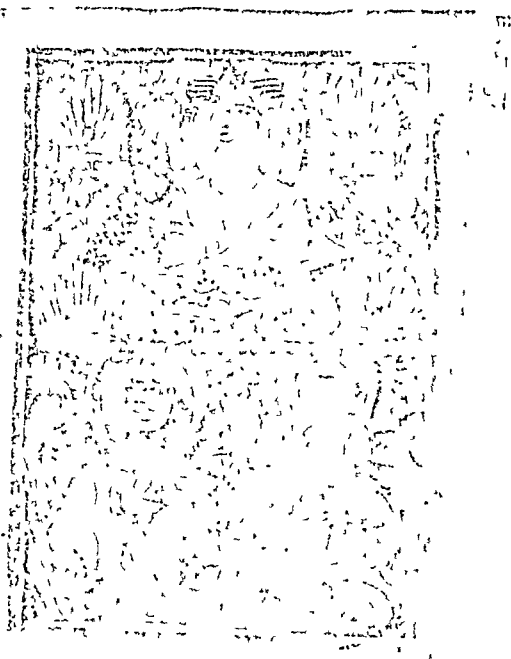


FIG. 93



FIG. 94



FIG. 95

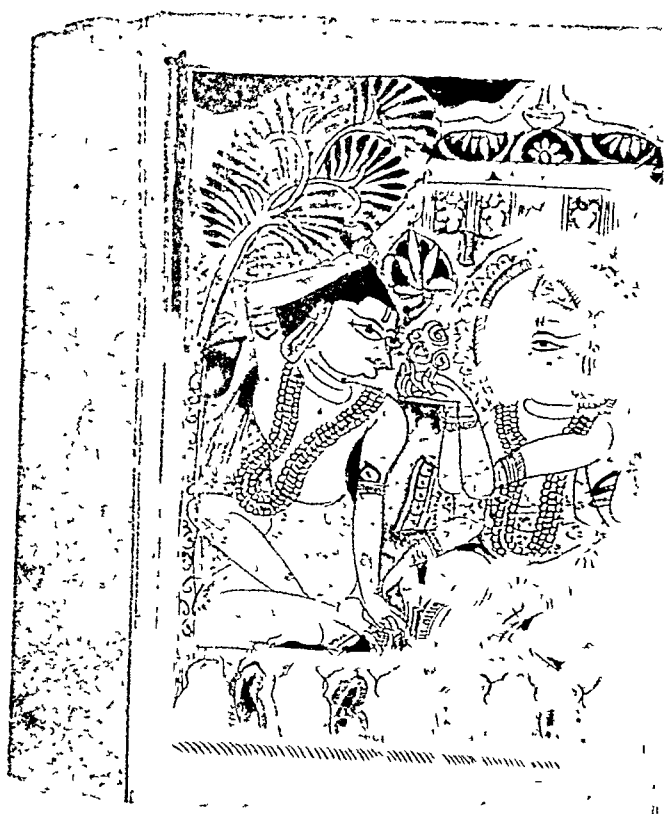


FIG. 96

ILLUSTRATIONS AND DESCRIPTIONS

PLATE 28

FIG. 93 B17 2278 73 (cf C 51 56 pls XIII 73 XIX 83) Two scenes in one (a) Kamatha performing the five fire penance (b) Parsva rescuing the snakes Implicit in K5 155 (Jtr 272) For the story see under figure 87

In the upper register sits Kamatha amid the five fires the four wood fires flame about him the sun the fifth fire is at the left of his head He is dressed in lower garment and scarf and wears a diadem, a costume which of course differs from that of Jain monks to whom Kamatha is a heretic His long hair is bound in the style characteristic of Hindu ascetics in this school of painting (cf BrEA 177) In the lower register is Prince Parsva on horseback the royal parasol being at the horse's head In front of the horse stands a servant holding an axe with which at Parsva's command he has split the wood At the extreme left is the log itself from which emerges the serpent

FIG. 94 Ha 91r (cf C 51 56 pls XIII 73 XIX 83) Two scenes in one (a) Kamatha performing the five fire penance (b) Parsva rescuing the snakes Implicit in K5 155 (Jtr 272) For the story see under figure 87

In the upper register Kamatha sits at the left surrounded by the four fires with the sun as a small circle directly above his head He wears no diadem here as he does in figure 93 and his hair is like that of a Jain monk At the right is a retainer of Parsva holding a long axe with which he has just split the log—the axe is still sticking in it—and the serpent Dharana is crawling out In the lower register is Parsva mounted upon his elephant coming up to Kamatha Before Parsva goes a retainer The painting has a legend in which several characters are illegible *kamatha pāncagnī parsva aśva* Parsva is of course not on a horse (as he is in fig 93)

The painting in B22 364 83 (C 56 pl XIX 83) not reproduced here follows our painting closely In the upper register the ascetic wears a diadem and long coiled hair (cf fig 93) in the lower register there is a male fly whisk bearer of Parsva The legend is *vāmadetī* Queen Vama (the mother of Parsva) but it appears to be an error the artist perhaps having failed to put in the intended scene The person on the elephant in our painting has the male forehead marking in the Boston illustration the marking is lacking Dr Coomaraswamy suggests that the lower scene may refer to Parsva's marriage but there is no evidence to indicate this

The interpretation of these otherwise uncertain scenes seems to be clarified by the painting reproduced as the frontispiece of Nahar and Ghosh An Epitome of Jainism (Calcutta 1917) In the upper register of that miniature sits Kamatha surrounded by the fires In the lower register Parsva comes riding up on an elephant while at the extreme left is the log with the serpent The scene is like that of our figure 93 except that Parsva rides an elephant instead of a horse I therefore understand our present scene (fig 94) to be the same as that reproduced by Nahar and Ghosh with the difference that the splitting of the log has been transferred from the lower register to the upper He 72v has a similar representation Kamatha appears amid the fires in the upper register Parsva appears on an elephant in the lower register before him are a servant with an axe and the log of wood with the serpent emerging from it

FIG. 95 He 83v Parsva in the initiation palanquin K5 156 (Jtr 272) For a description of the corresponding event in Mahavira's life see under figure 72

In a palanquin sits Parsva fully ornamented wearing a white robe At each side of the palanquin is a female fly whisk bearer Four males perhaps gods support the palanquin Sitting on the roof are two male conch blowers and two swans

Similar scene in figure 72

FIG. 96 Fr 63v Parsva plucks out his hair K5 157 (Jtr 272) Parsva tore out his hair in five handfuls which were caught by Sakra Cf under figure 73

The treatment is essentially the same as that in figure 73
Similar subjects are treated in figures 73 74 92 111 112 124

PLATE 29

FIG. 97. Ha,92v (cf. Sh pl. II; C 48, 51, pls. VII.44, XIII.75). Pārśva's austerities. KS 158-159 (Jtr 273). The details are not given in KS, but may be found in Bl 117-118, CP 256-257, the accounts of which are summarized under figure 87. While Pārśva was engaged in meditation, the Asura Meghamālin, a reincarnation of the ascetic Kamaṭha, on account of hatred extending through many existences, endeavored to distract him, first, by attacking him with wild animals, secondly, by attacking him with a fearful thunderstorm that raised a flood of water drenching Pārśva to the nostrils. Dharāṇa, a reincarnation of the serpent Pārśva had saved and now king of the Nāgas, learned of this by his transcendent wisdom, and came to protect Pārśva, covering the saint umbrellawise with his seven heads, wrapping his coils around Pārśva's body, and staging a play to divert Pārśva's attention from the storm. But throughout all Pārśva remained indifferent to both the attack of Meghamālin and the counter-activities of Dharāṇa. Then Meghamālin repented and bowed before Pārśva, giving up his evil ways.

Pārśva stands upright in the body-abandonment posture (*kiyotsargapratimā*). Around him is water, indicated by crisscrossed lines, rising to his neck. The heads of the snake-king Dharāṇa are over Pārśva's head, and the snake's body behind him, meant to be wrapped about him but for some reason—possibly a desire to put no other creature in front of a Tīrthankara—the coils are not completed at the places where they would pass before the body. The tail comes out between Pārśva's feet and trails off to the right-hand side of the picture. Two trees are partly arched over Pārśva.

FIG. 98. Cleve,46r (cf. Sh pl II; C 48, 51, pls. VII.44, XIII.75). Pārśva's austerities. KS 158-159 (Jtr 273). See under figure 97.

The main features of this representation are the same as those in figure 97, but in addition to being of superior aesthetic quality the painting shows a number of minor variations. Beside Pārśva stand two figures, each in human form, the one on his right being male and crowned with seven cobra heads, the one at his left being female and crowned with three cobra heads. These are presumably Dharāṇa, the snake king, and his wife Padmāvatī (PSM s. v. *paumāvātī*), who are Pārśva's tutelary divinities, that is his Yakṣa and Śāsanadevī (Gl 362).¹⁴ Over each of them is a parasol with swans and a water vessel above it. Below Dharāṇa is an elephant; below his wife a parrot. Sitting cross-legged at Pārśva's feet is a small male figure, with elbows sticking out and hands turned upright before him back to back. The posture would be unintelligible without further commentary, which we may draw from the miniature in B17.2278,75 (not reproduced here). There the same small figure appears clasping the legs of Pārśva as though to support him, and Coomaraswamy (C 51) understands it to be a Yakṣa. The guess is not unreasonable. It might also be the human part of the Nāga King Dharāṇa's body. The representation of a Nāga with a human body and head and a snake's body behind, while a snake's head tops all, is a common iconographic type. I incline, therefore, to think that the small human body is the human part of Dharāṇa's body, while the snake head belonging to him appears above Pārśva.

FIG. 99. Hb,84r (cf. Hū 74-75, fig. 12). Pārśva's *samavasaraṇa*. KS 159 (Jtr 273). On the fourth day of the dark fortnight of the month Caitra, under a Dhātaki tree, after a six-meal fast¹⁵ without drinking water, Pārśva obtained omniscience. Then he preached in his *samavasaraṇa*, which the gods erected for him. For a *samavasaraṇa* see under figure 80.

A *samavasaraṇa* may be either round, as in figure 80, or square, as here. Pārśva is represented with Dharāṇa protecting him, but many representations of Pārśva's *samavasaraṇa* omit Dharāṇa. In all essential respects this scene is like that in figure 80.

Similar subjects are treated in figures 1, 80, 92, 113, 126.

FIG. 100. Fr,66v (cf. Sh pl. II; Hū 74, fig. 12; C 48, pl. VII.44). Pārśva as a Siddha. KS 168 (Jtr 274-275). On the eighth day of the light fortnight of the month Śrāvaṇa, Pārśva, at the age of 100, after fasting a month without drinking water, on the summit of Mount Sammeta, died.

The painting is essentially like that of Mahāvīra as a Siddha in *Īṣatprāgbhāra* (fig. 81), but Pārśva is surmounted by the seven heads of Dharāṇa, and on his throne is a serpent cognizance.

Similar subjects are treated in figures 1, 81, 92, 114, 128.

¹⁴ For the full iconography of these figures and of the attendants of the other Tīrthankaras, see Johnson, H. M., *Indian Antiquary*, vol. 56, 1927. The iconography in this painting differs from Hemacandra's as given by Miss Johnson.

¹⁵ See footnote under figure 73.



FIG 97



FIG 98

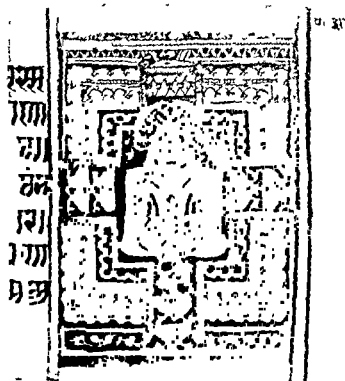


FIG 99



FIG 100



FIG 101

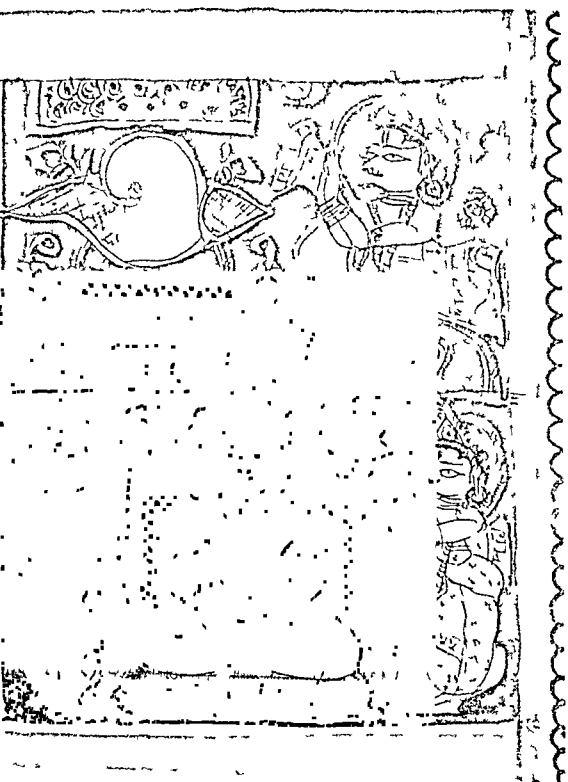


FIG 102



FIG 103

PLATE 30

FIG 101 Ha 97r (cf C 43 52 pls III 66 VIII 78 Br figs 3 39) Aristanemi in the Aparājita heaven KS 171 (Jtr 276) Aristanemi the twenty-second Tirthankara had dwelt in the Aparājita heaven 32 *sāgaropamas*¹⁸ (cf Kirfel 339) before descending to the earth Aristanemi is often known as Nemi

This painting is essentially the same as that reproduced in our figure 2 but Nemi's cognizance is the conch for which see under figure 104

Similar subjects are represented in figures 2 87 102 116

FIG 102 Ha 97v Two scenes in one (a) Adoration of Aristanemi's conch (b) Aristanemi in the Aparājita heaven Implied in KS 171 (Jtr 276) See under figures 101 104

The lower scene is essentially like that of figure 101 but only two attendant male figures appear beside the future Tirthankara In the upper scene the conch which once was Krishna's (see under fig 104), rests upon a throne under a canopy At the right is a male a lioning it The painting has a legend *dvārikānemiśvarasāhikapūrti* worship of the conch belonging to the Lord Nemi of Dvāraka" A parallel painting in He 80v (not reproduced here) bears the legend *nemiśaṅkha* "Nemi's conch"

FIG 103 Tr 67v Two scenes in one (a) Aristanemi's birth (b) Aristanemi's lustration and bath at birth KS 172 (Jtr 276 277) On the fifth day of the light fortnight of the month Śravana in the town of Sauripura Queen Śiva wife of King Samudrasajaya gave birth to Aristanemi He received his name, according to Devendra (CA 411) because at the time of conception his mother saw the rim of a wagon wheel (*nemi*) consisting of *rusta* jewels (the Prakrit *aristha* Skt *arista* 'jewel', is the same as Prakrit *rittha* Skt *rista* a kind of jewel see s.v. in PSM cf Jo 368, 472)

The two scenes are treated essentially like the corresponding scenes in the lives of Mahāvira and Parva See under figures 58 61

Similar subjects appear in figures 58, 59 90 91 118 119 and in figures 61 90 119

¹⁸ Some say 33 *sāgaropamas* Jtr makes the number 36 (so also in his text)

PLATE 31

FIG. 104. Hc,79r (cf. C 52, pl. XIV,79). Two scenes in one: (a) Ariṣṭanemi blows Krishna's conch; (b) Krishna tries to bend Ariṣṭanemi's arm. Implied in KS 172 (Jtr 277), but explicit in Devendra (CA 411-413). Nemi (Ariṣṭanemi) was a cousin of the Hindu hero and deity Krishna (an incarnation of Vishnu). As a youth Nemi had enormous strength. Once he went into Krishna's arsenal, where he picked up Krishna's bow. The warder of the arsenal warned him that no one, whether man, god, or demon, could bend the bow but Krishna. But Nemi bent it with the greatest ease so that the bowstring broke, and the noise shook the earth and the mountains. Then Nemi took up Krishna's conch and blew it, with such effect that the worlds of the gods, men, and demons were shaken. Krishna was alarmed, and fearing that Nemi would rob him of his kingdom asked his brother Baladeva what device he could use to prevent him. Baladeva tried to allay Krishna's fears, for he recognized that Nemi would not become an earthly king but was destined to be the twenty-second Tirthankara. Nevertheless Krishna remained fearful. One day he challenged Nemi to a test of strength in a fist fight. Nemi suggested instead an argument with words, but Krishna insisted upon a test of physical strength. Nemi then extended his arm, saying to Krishna that if he could bend down the arm he would be considered the victor. Krishna tried but failed.

In the upper register of our painting is shown, at the left, the conch on its throne, and, at the right, Nemi blowing it. In the lower register Nemi stands at the left with his left arm outstretched. Below the arm is Krishna, four-armed, trying with two of his arms to bend down Nemi's arm. In front of Krishna is his mace (a regular attribute of him as Vishnu). Overhead is the discus (*cakra*) of Vishnu, and between it and the mace an object that looks somewhat like a conch, also an attribute of Vishnu (hence of Krishna). At the bottom is a lotus, also an attribute of Vishnu.

FIG. 105. He,90r. Krishna tries to bend Ariṣṭanemi's arm. Implied in KS 172 (Jtr 277). See under figure 104.

This representation shows trees and foliage, thus conforming to Devendra's statement (CA 412) that the incident took place in a garden. Nemi extends his left arm. Krishna is four-armed and carries his mace and discus.

FIG. 106. Ha,98r. Krishna and his wives urge Ariṣṭanemi to marry. Implied in KS 172 (Jtr 277), but explicit in Devendra (CA 413). Krishna was now freed of worry that Nemi would take his kingdom. One day Nemi's father, thinking it time for his son to marry, asked Krishna to get Nemi's consent. Krishna asked his wives to influence Nemi. They began to joke Nemi on having arrived at a marriageable age, yet remaining unwed. He answered that there was no profit in associating with women and getting married; he preferred to strive for perfection and release from the cycle of rebirth. Then Krishna himself went to Nemi. He pointed out that all the previous Tirthankaras had married and raised families before entering upon the religious life. Therefore, urged he, Nemi also should marry and please his father. Nemi then consented. The bride selected was Rājamati, daughter of King Ugrasena and wife of Nemi in other existences. A variant of the legend, told in the Indian Antiquary II,138 and utilized by Dr. Coomaraswamy (C 15) and by Glasenapp (Gl 291), has Krishna urge Nemi to marry in the hope that sexual indulgence would impair his strength.

Our painting shows a bathing ghat with two men standing on steps that lead down into the water. The one at the left is Nemi, for he carries the same forehead marking that Nemi has in another painting from the same MS. (Ha,98v, not reproduced here). His hands are outstretched in expostulation. Krishna faces him with right hand upraised holding an object that looks like a horn. Behind each man, on the top step, stands a female holding a vessel presumably containing milk. These typify Krishna's wives. Our picture combines two moments of the narrative summarized above, the urging by Krishna's wives and the urging by Krishna himself.

a mile, and for about $1\frac{1}{2}$ mile through a wood, beyond this the lands of a village named Jumjuri⁽¹³¹⁾ occupied the banks of a torrent⁽¹³²⁾ for about a mile in width. The houses are beyond the torrent and near them are a good many stones rudely carved which seem to have belonged to a square building perhaps twenty feet in diameter. The people suppose it to have been a temple but have no tradition by whom it was founded or to what God it was dedicated. They say that they found it in its present state when they cleared the country. Immediately beyond the cleared lands of this village in a wood, I passed a torrent,⁽¹³²⁾ and about $1\frac{1}{2}$ mile beyond that I crossed the Hurhuriya,⁽¹³³⁾ a small river which at present has no stream, but good water may at all seasons be had by digging into the sand. A little beyond it I found an iron mine. It occupied a space of about thirty feet square perforated by many small pits, about four feet from each other and six feet deep. Whenever the work men have dug five or six feet of the vein, they make a new pit at its end and then advance again. The clay and soil may be four feet thick and the vein little more than a cubit. The matter in the vein is hard and requires to be cut with a stick pointed with iron like a chisel. The small fragments are then taken out in baskets. In this mine most of the ore is Asula small irregular smooth concretions which however contain much extraneous matter and must be broken and winnowed before the ore is fit for being put into the furnace. Intermixed however with the clay and quartz matter in which the Asula nestles, is much of the Dusura ore, and some masses of a ferruginous matter which are considered as unripe. The ore when fully prepared is called Bichun⁽¹³⁴⁾ or seed. I then went to Kukoriya,⁽¹³⁵⁾ where the miners reside, almost two miles from the Hurhuriya. The forges are exactly on the same plan as in Banka.

(131) Jamjuri

(132) Neither of these streams is named on the S.S.

(133) Harharin M.

(134) From the Sanskrit word *bijash* (Hindi, *bi* *bijam*) seed.

(135) Pokharin.

The people complain much of their poverty, which is unavoidable from their own account of their idleness

From Pukoriya I turned towards the south, and about a mile from it recrossed the Harhariya. About two miles from thence I came to a small ruined mud fort at the village of Kaduya,⁽¹³⁶⁾ where the zamindars formerly resided. The country near it is well cultivated, and very beautiful. It is situated at the foot of a small rocky hill west-northerly from the hill of Lagoya,⁽¹³⁷⁾ where the family at present resides, about two coses distant, in a still finer situation. From the fort I went about four miles south to a village called Chandu Bathan,⁽¹³⁸⁾ in the Mauza of Pandoriya,⁽¹³⁸⁾ where I found some other forges of the same structure, and a mine consisting entirely of the Dusura, or second quality of ore. The people say that they very seldom find any ore in the torrents. In several parts I observed small quantities of black ferruginous sand, lying on the sand. It seems exactly such as is usually smelted in Mysore.

From this mine I returned to Nuni, distant rather more than five miles. The roads all the way frequented by carts. All the rocks I saw to-day are granite, and except at Nuni I saw not the smallest appearance of stratification. There a granitic rock in decay has assumed a schistose vertical structure, everywhere else it was in very irregular masses, and in decay scales off concentrically, or where on a plain surface, horizontally, in layers from one to two feet thick.

27th —I went about three miles towards the eastern hills to see a place, where I was told that the people collected Gangot⁽¹³⁹⁾ for making lime. After leaving the low lands near the river, the country is exceedingly broken with ravines, and not more than half of it is fit for the plough. The soil is red clay.

⁽¹³⁶⁾ Kendua.

⁽¹³⁷⁾ Lagwa Pahar.

⁽¹³⁸⁾ Neither of these is marked on the S S

⁽¹³⁹⁾ Gangat, the calcareous nodular limestone used for making lime and for road-metalling, more widely known as *kankar*

much intermixed with rocks of granite in decay. All the little torrents contain the black ferruginous sand, which it is said, might in the rainy season be collected in considerable quantities. This kind of broken ground occupies all the interstices between the hills called Mukurkund, Moyana, Garuduma, Baskop and Nundunakop⁽¹⁴⁰⁾ which form one group. On Moyana I perceived some cultivation said to be carried on by the Neiyas⁽¹⁴¹⁾ who pay no rent.

On arriving at the expected place, I found that no lime had been burned since the time of the zemindar's father. I found an old kiln about four feet in diameter, and three high, built of clay. Near it was some of the Gangot which exactly resembles the small nodules of calcareous tufa common in Mysore, but has involved small pebbles chiefly of quartz such being everywhere common in the soil. From some traces of digging it would appear that the Gangot had been collected from a small hill of yellowish clay adjacent to the kiln, and probably was scattered among the soil near the surface. I see nothing essentially different in its nature or origin from the similar nodules found in the clay hills near Bhagulpur, and called Kongkar,⁽¹⁴²⁾ but its lime is said to be much whiter.

Nuni is a pretty large but irregular village which does not contain anything like a house, but the huts

(140) It is doubtful which of the hills is meant by Moyana (probably the Pokhuria Pahar) the others named are in order Makarkonda, Garduma, Basko and Mandana of the S.S.

(141) The Naliyas are a most interesting tribe that have been wholly inadequately dealt with in Risley's *Tribes and Castes* (s.v. Naliya and Kaddar). Buchanan refers more than once to the Naliyas or Laiyas who were formerly the priests of the Mal or Malor. In his Report (M.S. p. 197) he writes of the Naliyas formerly their gurus and purohita. The very fact that they were in his day still admitted to have been originally the gurus and purohita of the mountaineers indicates, as will be recognized by such as have devoted attention to the study of the survival of ancient customs in India, the antiquity of these people and the important position they once held. We have several references in old accounts to their connexion with the ancient iron-smelting industry in the Rajmahal and Kharakpur hills. We still find them in more than one locality in the hilly tracts: and some of the best trackers in the jungles that I ever followed were Naliyas. These people deserve the attention of a competent Indian ethnologist.

(142) Karkar. See note (139) above.

are tolerably neat, and many of them have their walls painted with ruddle and Mokor mati, which gives them a neat appearance. A good many Bengalese traders have settled in it, and the neighbouring villages

28th November—I went to Lakardewani⁽¹⁴³⁾ through a romantic country, very much neglected. I crossed the Doba twice. This river does not increase in size, as it advances, although it receives several small streams from the hills. Lakerdewany is called five coses from Nuni, but does not appear to me to be above nine miles. It is a fine situation, and the idea of its being more unhealthy than usual is in all probability without foundation. To this cause is attributed the removal of the Thanah to Nuni, but the real reason in all probability was, that Nuni had a comfortable bazar for the Daroga, while Lakerdewani is a mere hamlet, around which however there is a good deal of cultivation, its cleared land extending about a mile.

In the evening I went about a mile north-east, to visit a hot spring named Tapni, ⁽¹⁴⁴⁾ which signifies merely the hot place, Tap ⁽¹⁴⁵⁾ in the provincial dialect meaning heat, while in the more polished dialect it is usually applied to signify fever. The hot spring is situated at a little distance beyond the Gurguri, ⁽¹⁴⁶⁾ a fine little river, that comes from the north-east to join the Duba, ⁽¹⁴⁷⁾ and which contains the greatest quantity of running water of any of the torrents that I have seen in these hilly parts, but its channel is not very wide, and in Spring it becomes entirely dry. The spring arises on a field sloping

⁽¹⁴³⁾ **Lakra Dewani**

⁽¹⁴⁴⁾ Marked 'Hot Springs' on the S S. This is number (2)—Tatloi—of the hot springs named on p. 11 of the *Gazetteer* (1910)—not by any means an exhaustive list.

⁽¹⁴⁵⁾ *Tap* is a Sanskrit root, meaning to 'shine', 'be hot', from which is derived *tapta* 'warm', *tapana*, 'warming', &c. The feminine form *tapani* is used of a warm spring or flow of water. The same root is found in the first part of the name in the *Gazetteer*, *tapta* becoming *tāt* in the vernacular.

⁽¹⁴⁶⁾ **Bhurburi N.** Both names (onomatopœic words) have the same meaning, viz., 'bubbling', 'rippling', or as we should say, the 'babbling brook'.

⁽¹⁴⁷⁾ At this point, named **Matihara N.** on the S S. The stream is one of the two principal headwaters of the Mor river.

gently towards the river by the side of a rock which does not rise high above the soil, and in decay consists of thin or slately strata disposed vertically and running easterly and westerly. The stone is a fine grained aggregate consisting of white quartz and felspar, and a black micaceous matter which like that of all the granite in the district which I have seen yet, appears to me to be iron ore rather than hornblend. The materials are disposed in a laminated manner, that is certain layers contain more and certain other layers contain less of the micaceous matter alternately, without rendering the real structure of the stone slately. The ground by the side of this rock is sandy and spongy for about ten feet wide. The water does not issue from any one part in particular but oozes from the whole surface of the sand until it forms a stream, which never dries. The upper end of the sand from whence the water begins to ooze is not hot but about twenty or thirty feet from its upper extremity the sand for the whole width of the channel becomes hot and continues so for perhaps twelve or fifteen feet. In the middle it is hottest and there many air bubbles issue from the sand not in very great numbers nor very regularly but they are pretty large. Where most of these issued the thermometer placed in the water but not sunk into the sand, rose from 72 F to 148° (148). The natives could not bear the heat with their naked feet. A constant vapour proceeds from the surface of the hot space but it seems to me to be merely that of the evaporating water condensed by the external cold. I perceived no uncommon smell about the place and a lighted candle held over the place, from whence most of the air bubbles proceeded was in no manner affected. I presume however, that the air is the heated matter and affects the sand, as it passes through and this again communicates heat to the water. A fine bath might no doubt be erected at the place which somehow has escaped the fangs of superstition.

(148) A high temperature for a spring in South Bihār, comparable with that of the Janam Kupā and Bhimbāndh springs in the Kharakpur hills.

29th November 1810 —I went about nine miles to Dumka. About two miles from Lakerdewani I crossed the Gurguri, and about a mile farther came to the boundary between Haruya pergunah and that of Belpata ⁽¹⁴⁹⁾. The former is the south part of the Hendooa R the northern part of which, together with the adjacent part of Boglipour R are now considered as belonging to Korokpur. Indeed the Rajah of that country claims Haruya also. About five miles from Lakerdewani I crossed the Kusaru, ⁽¹⁵⁰⁾ a small river like the Gurguri. Owing to the vicinity of the hills and springs they contain more water at present than the Doba or Chandun, but their channels are small, and in floods they are comparatively trifling.

Sumar Singh is called a Rajah, but is one of the Sirdars of the hill people who receive ten rupees a month. He lives at Digir Pahar ⁽¹⁵¹⁾ about two coses north and east from Dumka on the plain where he has a large free estate but has subject to him a considerable extent of hills. He is not acquainted with the term Dungareeah ⁽¹⁵²⁾ given to the lower order of hill people by Capt Brown, ⁽¹⁵³⁾ but calls them Projahs ⁽¹⁵⁴⁾ or Raiyots, two low country names. The whole tribe in this vicinity call themselves Mal.

⁽¹⁴⁹⁾ Handwo and Belpattā. The former is now one of the *parganas* of the headquarters (Dumkā) subdivision. In Rennell's and Captain Browne's times it was a *ghatwālī* tenure held by a Kṣetawī family included in the Khairakpur Rājā's estates, and, as will be seen from the text, it was still claimed by that Rājā in 1810. W S Sherwill, who carried out the revenue survey in 1846-50, wrote that Madho Singh held greater part of the *pargana* from the Rājā of Darbhanga (who had purchased part of the Khairakpur estates in 1845). It is marked Herwoe on Rennell's 1773 sheet, and Hendooa in the *B A*. Browne writes Handway.

Belpattā is now a *tappa* in the south of the Dumkā subdivision. When Rennell's assistants surveyed south Bihār in 1766-70 it was included in Birbhūm, by the Rājās of which it was then held. It was transferred to Bhāgalpur either in 1781 on the recommendation of Cleveland, or in 1795 at the request of Mr Fombelle, it is not clear which. (See *Gazetteer, S P*, 1910, pp 44, 245).

⁽¹⁵⁰⁾ Not named on S S

⁽¹⁵¹⁾ Digir Pahar

⁽¹⁵²⁾ Dhāngar, vul Dhangariyā, originally meaning 'hillman' (Hindī *dhāng*, a 'hill'), now recorded as a separate caste. See Risley, *T & C*, 219.

⁽¹⁵³⁾ Captain, afterwards Lt Colonel, James Browne, who for several years held charge of the "Jungleterry". See Appendix 1.

⁽¹⁵⁴⁾ *Prajā*, a Sanskrit word meaning literally 'offspring' and then 'subject', and so often used in the same sense as *raiya*.

The natives of the low country speak of three kinds of hill people Mar Poil⁽¹⁵⁵⁾ called also Kumar Poil, Sumar Pal and Dhar Pail The Sumar Pail are the Northern tribe The other titles belong to the Mal The Dhar are the Rajahs of whom there are three, Sumar Sing Hori Sing and Roton Sing and all their children and descendants The Kumar Poil are supposed to be descended from brothers of the first Rajahs The Mar Poil have the same descent, but originally came from a different district Their rank is considered as equal The Dhar Poil also came from another district No persons reckoned Mal except these three tribes The Dhar Poil are most numerous Next the Mar Poil There are Sirdars, Naibs and Manjis of each kind and all live intermixed all speak the same language, and all intermarry They cannot marry in the same family in the male line The Rajahs are all called Singh, and cannot marry the daughters of a Singh There are four other real distinctions of rank Girhi⁽¹⁵⁶⁾ Majhi⁽¹⁵⁷⁾ Aharas⁽¹⁵⁸⁾ and Neya⁽¹⁵⁹⁾ which last are the lowest as having been Pujuris⁽¹⁶⁰⁾ It must be observed that among the Bhuiyas and other tribes these people are in general all called Neyas which is applied to the whole of the tribe The Aharis were hunters The Majhis were chiefs of villages The Grihi were originally rich and lived with hospitality Now all follow the same kinds of professions and a Grihi can marry with a Grihi or with any of the others the rank being hereditary in the male line All in this Rajah's territory who are pensioned by the Company are either Singhs or Majhis, none of the Grihis although higher than the Majhis, have a

(155) Buchanan spells this word *poi* in a great variety of ways as will be noticed. It is possible connected with the Prākṛta (and Hindi) word *pāl* meaning a boundary or limit but it may be of Dravidian origin.

(156) *Girāi* (Sana. गृहिन) a householder

(157) *Mānjī* headman the village headman among the Sontāls.

(158) *Aharī* vul. *aharīd* (fr Sans. शिकरक) a hunter

(159) See Note 141 above.

(160) *Pājāi*, a priest

share in the government and the two lower ranks would not be admitted. He does not know what may be in the other two Rajahs' countries. One of his Naibs is a Sing, the other and all the Majhis are of the Majhi rank. The Mal call the other hill people Chet,⁽¹⁶¹⁾ and the two tribes do not live together. The languages are different. There are very few of the Mal in the battalion, my informants know only of four men. Formerly there were many, but they do not like such a clear country as Bhagulpur. They have no tradition of having come from any other country, nor of any of their caste being settled in any other part. They know nothing of the Mar, but have no knowledge of Godda Perganah, where these are settled, and are considered as of the same race with the Kumra,⁽¹⁶²⁾ and intermarry with that tribe. Mar and Mal are indeed different pronunciations of the same word⁽¹⁶³⁾. Before Mr. Cleveland's settlement the Rajah had much power. He appointed a Manjhi for each village, from among the persons of a certain family, but could not dismiss him without an assembly of all the nation, from which no rank was excluded. He also appointed a Phaujdar to command the troops, and could dismiss him at pleasure. He had also a Dewan. Each raiat gave some share of their crops, a goat, a pot of honey, and a bundle of ropes to the Majhi, who again gave a share to the Rajah. The same custom continues. The land seems to be fixed property. On the hills a field is cultivated two years, and then lies fallow five or six, but a man may prevent any other from occupying his fallow land.

(161) This has been supposed to be a corruption of the Hindi word *chit*, meaning 'lying on the back', 'supine' (see *Gazetteer*, 1910, p. 82) but this is improbable. In his Report (MS, p. 190,) Buchanan writes that the southern tribe "usually call the northern tribe chet", distinctly making the *t* as cerebral. The Revd. Ernest Droege, in his *Malto Vocabulary*, gives

"Chete, one of the lower races of the aborigines of India," so it appears to be a Malto word. We may, however, compare the Sanskrit word *cheta*, meaning a 'servant', 'menial'. At all events it has no connection with the Hindi word *chit*.

(162) This is undoubtedly so, *r* and *l* being so commonly interchanged. The name probably meant simply 'mountaineer'. Cf. Oppert, *The Original Inhabitants of Bharatavarsa or India*, pp. 18-21, 37-38 &c. But see also Dalton, *Ethnology of Bengal*, p. 138.

In Sraubon and Assavi⁽¹⁶³⁾ they cut all the trees and burn them in Choit and Bysak. Then with stick one or two cubits long, and armed with a pointed iron, three fingers broad they dig (after the rains in Spring) holes in which they put seeds of Goronri (Maize) Jonola (Sorghum)⁽¹⁶⁴⁾ Kolayi (Bora)⁽¹⁶⁵⁾. They then sow on the surface Kheri⁽¹⁶⁶⁾ and Kaungni⁽¹⁶⁷⁾. Some times they sow there first and then plant the other articles. They sow no cotton and have no hill rice. Next year they only plant the maize and sorghum. A field of this kind is called Bari⁽¹⁶⁸⁾. They always move their hut with their field. Round their house they have a few plantains, chili, sag, and Tarkari⁽¹⁶⁹⁾. They collect wild yams. In the hills some men but not all have cows for their milk. They have goats fowls swine and pigeons for eating. They use Bakor⁽¹⁷⁰⁾ to ferment both maize and Sorghum, and usually use it without distilling, but they can distil. They make no clothes. They cannot make iron. They buy all their salt iron and clothes. They have no oil on the hills. Merchants who supply them are repaid in Kolayi and nothing else. (I afterwards found that charcoal is their great resource). In their possessions in the low country they have regular rice fields which they cultivate with the plough, but they also cultivate baris⁽¹⁶⁸⁾ there, and often cultivate these with the plough and rear Sirsoo and Til⁽¹⁷¹⁾ besides the above-mentioned articles living always near their rice fields but changing their huts with the Vari⁽¹⁶⁸⁾.

(163) The Hindi months referred to here as will be obvious are Śrāvṇa, Āśvina, Chaitra and Vaiśākha, corresponding to July August September October March April and April May respectively.

(164) *Sorghum vulgare* the jadr millet.

(165) It is not clear what plant is meant. *Kolā* is pulse (*Phaseolus* sp.) while *Bora* is the cow pea (*Vigna Catjang*).

(166) Kidney bean (*Phaseolus acuminifolius*).

(167) The Italian millet (*Setaria italica*).

(168) I.e. homestead (Hindi *bāṛī*).

(169) Red pepper green potherbs and vegetables.

(170) *Bakkār* a ferment containing a diastase enzyme made from the roots and leaves of several plants.

(171) *Sarso* Indian colza (*Brassica campestris*) and *tīl* gingelly (*Sesamum indicum*).

The system of cultivation indicated by Buchanan is the wasteful *kṛdō* or *jāṁ* method still practised by the Sauria Maler in the Rājmaḥāl hills.

Every one has land; but some not enough, and these work in their spare time for others who give them food and clothing No slaves.

Their chief gods are Sirkum, a male, Lukima his wife, and Bosomoti⁽¹⁷²⁾ their son They know of no other gods The great sacrifices (Pujas) are performed at two seasons —In Agron,⁽¹⁷³⁾ when the Sorghum and Kalayı are ripe. They then offer these fruits, hogs, goats and fowls to Sirkum and Lokima At their national feasts every man makes his own offerings, they have no priests nor set form of prayers, but pray for favour and success and thank the gods for the harvest The family dances and sings, then feasts and drinks, as much as it can afford There is another sacrifice of the same kind to Bosomoti in Magh, when the maize is ripe They have Nagara, Pakuaj, Dhol, gul Sanayı and Bansi⁽¹⁷⁴⁾ for music The Rajahs and some rich men have fallen under the authority of the Vorno⁽¹⁷⁵⁾ Brahmans, and Dosnami Sannyasis The former have instructed them to perform the Dosohorra,⁽¹⁷⁶⁾ and to repeat montros before a Bel tree They also repeat muntros for all in commemoration of their departed parents and at funerals The Sannyasi performs Jog for them, that is, prays over a fire, in which ghı has been thrown,

(172) I do not find such names in any of the other accounts of the religion of the hill people It is a pity that the history, religion, customs and language of both branches of these hill men have not been more thoroughly investigated on scientific lines

(173) Agrahāyana (vulg Aghan), corresponding with November-December

(174) These names represent *naqāra* (Ar), a kettle drum, *pakhāvaq* (H) a kind of drum, *dhol* (H), a large drum, *shāhnāy* (Pers), a trumpet, and *bansi* (H), a flute

The word *gul* is not used in Bihār for any kind of musical instrument, but Sir George Grierson has drawn my attention to the word *gal* (which appears to be derived from the Sanskrit गलः, which also means a kind of musical instrument) given by J N Das in his *Bengali Dictionary* as meaning "a kind of musical instrument" This may be the word heard by Buchanan Sir G Grierson also points out that the Sontālī root *gol* means to 'whistle'

(175) Buchanan probably means *varna-samkara*, i.e. of mixed caste, or origin

(176) *Daśahra*, here the 10th of Āśvina (*śukla pakṣa*), the occasion of the well-known festival in honour of Durgā

and gives them Upades (177) They burn the dead on the same day that they die, and the great procure a Purohit They mourn for five days, and then give a feast, eating and drinking The Neya pujaris have been totally discarded which accounts for their disgrace The Pujari at marriages always repeats montros (178) Premature marriages are in use among the rich but the poor often wait until the girl is twenty Their inclinations are in no case consulted The girl's father always gets some money, but not equal to his expense on the occasion A man may marry several wives A widow may live as a concubine (Sumud)(179) without religious ceremony, but the connection is permanent Adulteresses are turned away, but may become Sumuds(179) with another man If a man gets an unmarried girl with child, he must marry her They inoculate for the small-pox They have Dewasis(180) among themselves, who are appointed by the other Dewasis to worship Masan (181) who is called also Gosaigh They are instructed in some prayers and ceremonies, which are employed when any one is sick or has been bitten by serpents or is possessed by devils Masan is a malevolent spirit but of greater power than Sirkum who is the domestic god and very good natured He has no images nor temples The Dewasi is paid for his trouble The eldest son succeeds to all dignities and to all the land but he gives his brothers a share to cultivate and the movables are divided equally The women are left to the charge of the sons, until provided for by marriage or concubinage Even the Rajahs live very miserably Sumar Singh is a very

(177) *Upadesa* instruction.

(178) *Mantras* prayers, mystical or magical formulae.

(179) The second marriage of a Hindu widow is generally called *saghi*. The term *samada* (from Sans. *sambandha* in the sense of matrimonial alliance) is also used in some parts.

(180) This word does not seem to be used by other writers; but I find that in his Report (MS.) Buchanan explains the *dewasis* of the Southern Mountaineers as kind of priests that seem analogous to the Demans of the northern tribe.

(181) *Masan* (H.) from Sans. *smadana*, a place where the dead are burnt, here, as frequently, applied to the spirit male or female that haunts the site. Cf. Crooke *Folklore of Northern India*, I 133 259 (1896 edn.)

poor creature. A relation with him has some sense. From them and their attendants I took the foregoing account ⁽¹⁸²⁾. The relation accompanied me to give the vocabulary ⁽¹⁸³⁾.

30th November —I went to visit the iron mines near Dumka. The occupied lands of this village extend almost a mile in diameter, and rise towards the centre from all sides with a very gentle ascent. Towards the east at a little distance there are some low hills, which apparently consist of irregular masses of granite. Between these and the occupied land of the village is some ground broken with many ravines, and so far as I saw, of a reddish clay, containing in some parts many angular masses of quartz. The lands of the village consist of a good clay soil, inclining to yellow, and mixed with small pebbles of quartz. The mine has been opened at the south-east side of the cultivated lands, and seems to terminate, where the broken ground commences. The people have there evidently dug among the fragments of quartz, and say, that it was without success; but the mine is immediately adjacent under the soil of yellow clay, which there, is not above two feet thick. In this, for about a space of forty feet square, they have made small excavations, and taken out the ore to the depth of about a cubit. On the upper surface it forms angular nodules from the size of the fist to that of the head, which are compacted together, and the interstices filled with soil. This renders it easily wrought, and the pieces are taken out with the miserable stick pointed with iron used as a pickaxe or spade. Below this depth the mine becomes more solid, and the natives neglect it as too expensive.

(182) Had Col. Dalton seen this account, or Buchanan's Report, unmutated by Martin, he would not have written that Buchanan only referred to Lt. Shaw's monograph (Is. Rec., IV) "instead of giving us his own observation" (see *Ethnology of Bengal*, p. 254). One of Buchanan's most striking characteristics was the care he took to record first hand information.

(183) I have since discovered this Vocabulary among the records at the I.O., where it appears to have lain unknown all these years, and am taking steps to examine it with a view to publication, in whole or part, as may be desirable.

How far it extends either in depth or horizontal distance is not known. Some has been dug on the side of a tank about a hundred yards east from the mine lately wrought and there can be little doubt that it extends so far, and probably may reach over the whole lands of the village. Its depth also is probably considerable as it becomes more compact as it descends. At Nunī I had been told, that most of the miners had retired to Dumka. Here I am told that last Spring all the miners had retired to some other place. I suspect that at both places the numbers are concealed. At the mine here I observed heaps of the ore lying as if recently dug out. The ore is first washed to separate the clay. It is then powdered by the pickaxe and a stick a violent labour and then is winnowed to separate the earthy matter.

Some men of the families of the Thakurs, Thakoirs (184) and Baboos, whom in Capt Brown's time every one called Bhuiyas and are now commonly called such by other tribes said that nobody called them so, that they were Surjī Bongs (185) and knew nothing of Bhuiyas or Onwars (186). They would only acknowledge that before they obtained zemindaries, they were called Rai. They have now pure Brahmans as Purohīts, and Sannyasis or Bhrahmacharis for spiritual guides, and may form two annas of the population of Belpatah. They follow the same rule in eating etc. as the Rajputs.

One of the Bhuiyas not of the blood of the Tekoirs says that both they and he are Bhuiyas, and descended from the stock but that the Tekoirs and their kindred are of higher rank and greater purity. He says the proper name of the tribe is Raj Bhuiyas. Those who are rich have Brahman Purohīts but the poor content themselves with Purohīts of their own who pray to the sun and to Bosomatī. They have no communion with the Māl. They eat fowls, goats,

(184) Tekoirs, or *tikoirs* so called from the *tikā*, or mark placed upon the forehead of a subordinate or feudatory chief.

(185) i.e. *sūryavanshī* (of the solar race).

swine, but not beef, and drink spirituous liquors Their Gurus are Sannyasis They have a different or bad dialect of the Bengali like the Mal, which has a strong affinity to the dialect of Birbhum He knows nothing of Unwar⁽¹⁸⁶⁾ Bhuiyas, nor of Bherbhuiyas⁽¹⁸⁶⁾ Most of the Rai Bhuiyas live to the west of Dumka They are all cultivators with the plough They gather wax, and cultivate Tessor⁽¹⁸⁷⁾

Dumka is a poor village Formerly, it is said, it contained four hundred houses, but now less than a quarter of the number This is attributed to the depredations of elephants, but is more probably owing to the low assessment

1st December —I went about nine miles to Simla⁽¹⁸⁸⁾ About two miles from Dumka I crossed a torrent called Lukhissin⁽¹⁸⁹⁾ from the name of an adjacent village About 1½ mile farther I crossed a fine little stream called Beyar⁽¹⁹⁰⁾ Three miles farther I turned off to the left, and went northerly for about 1½ miles to visit the iron mines of Gamra⁽¹⁹¹⁾ The furnaces are managed by Kol exactly on the same plan as those already described The ore is found in small nodules like Kongkar near the huts It is in a thin stratum, not above one foot thick, and crossed with from one foot to eighteen inches of a red clay soil The Kol say that they find it in a great many places, and have no occasion to dig deeper It is beaten to small pieces, and cleaned, before it is put

(188) See note (116) above Risley in his *Tribes and castes* (I, 13) mentions "Ber or Bhar-Bhuiyā" as a subcaste of Bhuiyā in the Sontāl Parganas, but the trouble is that Buchanan in his *Index of Native Words*

has **बेहड़े भुइया**, and in his Report (MS BK 2, p 188 f) he writes this word "Beher" several times I have been unable to trace the meaning It may possibly be a word of Dravidian origin I suspect, however, that the term originally meant simply 'without plough' (cf **बेहड़** used of land, as meaning unploughed, and so unploughable, rough, etc., the soft *r* becoming cerebralized as so often occurs in the dialects Rāi Bhuiyā is, of course, the same as Rāj Bhuiyā

(187) See note (115) above

(188) Parsimla.

(189) Not named on S S

(190) This seems to be Gandar N. of the S S Mr H L Allanson, upon reading this portion of the Journal, was inclined to think Buchanan had camped at Purānā Dumkā, though his description of the occupied land tallies with the situation of Nayā Dumkā The 2 kos distance to Dighi also seems to indicate Purānā E.

in the furnace, and seems very different from the ore at Dumka Mr Farquhar⁽¹⁹²⁾ formerly made advances to these people An agent of the zemindar now does the same, and gives from $1\frac{1}{4}$ to $1\frac{1}{2}$ R a man for the iron, as it comes from the furnace Having returned to the road, I went about $1\frac{1}{2}$ mile to the Dauna⁽¹⁹³⁾ river, a considerable torrent, but now almost dry From thence to Simla is about a mile The women here do not seem so shy as towards the north, the influence of the customs of Bengal beginning to operate At Dumka most of the people speak a kind of Bengalese, but being chiefly Bhuiyas and Santars the men are vastly jealous

(See notes to the agriculture, December 1st, page, 9)

The Brahman Pujaris never offer the worship to the three gods of the Santal Each man offers for himself The Pujari attends at funerals, and sometimes at marriages but they are often entirely managed by themselves in a meeting of the heads of families The Santal play on a flute of Bamboo with six holes, a soft enough sound, but their tunes are very monotonous They often sing and play the tune alternately They also have two kinds of drums

Simla is a miserable place inhabited by Bhuiyas, who call themselves Surjo bangs and Singhs, but acknowledge that they are Ghatwal Bhuiyas, which the Surjobang in general refuse to do They call the other Bhuiyas, Rai Bhuiyas, and the still more impure tribe, Bher Bhuiyas They know nothing of the Unwars

2nd December —I went to Protappur⁽¹⁹⁴⁾ in the district of Birbhum, there being no direct road to Thanah Chandrapur⁽¹⁹⁵⁾ My road led very much towards the east over a ridge of hills, which seem to go nearly south and north and which rises into peaks

(192) It is not known who this Mr Farquhar was; perhaps Walter Farquhar who was Commercial Resident at Boalis in 1808-12.

(193) Dauna N.

(194) Partabpur

(195) Chandrapur now a small village on the south bank of the Dwarka N in the north of the Birbhum district.

not very rugged, nor was the ascent or descent where I passed very great, as the road winds between the peaks. The ridge seems to be called Dulkata,⁽¹⁹⁶⁾ and I began to ascend it about $1\frac{1}{2}$ mile from Simla, having about midway crossed a small stream called Jugudi⁽¹⁹⁶⁾. About four miles farther on I came to what was shown to me as the boundary of the two districts, having passed another small stream called the Tanada,⁽¹⁹⁶⁾ which runs to the south, and having seen a road passing towards my left, which is said to be frequented by the carts of the Neyas or hill people who carry charcoal for sale to the iron works at Dyoucha⁽¹⁹⁷⁾. This I think is the road that I should have followed. The hills on the left or north-east of the road were here called Rungalea⁽¹⁹⁸⁾. Proceeding among the hills about three miles farther, I descended to the plain and about half a mile from thence I came to the Dobada,⁽¹⁹⁶⁾ a considerable torrent running south-west, from whence it is about $2\frac{1}{2}$ miles to Protap'pur, all the way through stunted woods containing much *Mimosa Cattechu*, of which there is very little in the Lakardewani division. Many allege that the whole of these woods belong to Bhagalpur, and Belpatah. The ridge of hills, over which I passed, is by no means so rugged as the detached peaks towards the north, and many parts are fit for the plough. The woods on it are the largest and thickest of any that I have yet seen in the district, and contain a few small bamboos, but Sukuya⁽¹⁹⁹⁾ is the most common tree. I saw no appearance of stratification. The rocks are mostly granite, but on the highest part of the ridge I observed large rocks of a kind of red hornstone, that is a hard stone of a very fine granular earthy substance, of great hardness, and having splintery fragments. It contains, however, many black points, and in decay assumes a white sandy appearance, and perhaps may

(196) None of these names are to be found on the S S

(197) Possibly the **Dudhichua** of the S S

(198) A village **Rangalia** is marked on the S S

(199) i.e. *sakwā*, the *sāl* tree (*Shorea robusta*).

be considered as a very fine grained aggregate Besides this I found glassy quartz in mass, and this substance indeed forms the greater part of the rocks on the plain, on the Birbhum side of the hill I observed there a heap of about twenty feet diameter, consisting of the calcareous nodules called Gangot, mixed with yellowish clay On all sides they were surrounded by decayed quartz In many places there, as well as in all the hilly parts of Banka and Lakardewani I observed the surface of sandy places covered with dark brown nodules of an irregular rounded shape and from the size of a pea to that of a hazel nut They are covered with a kind of shining enamel

3rd December —I went rather less than five coses to Thanah Chandrapura passing through the Birbhum district until I came close to the Thanah The country level I observed a considerable space covered with Gangot

4th December —I went to visit some quarries of Khor⁽²⁰⁰⁾ which are on a hill of the same name⁽²⁰¹⁾ the southernmost of the Rajmahal range Having crossed the Duyarka⁽²⁰²⁾ about halfway I reached the hill about three coses from the Thanah The country is tolerably level but rises into swells towards the hill and in many parts the soil is very poor but probably $\frac{2}{3}$ of the whole is fit for cultivation At present after leaving the Thanah a mile all is waste and even near it nothing is cultivated except low spots fit for rice The woods are stunted partly for tassar, and partly by the makers of charcoal The barren parts consist either of land covered with Gangot which lies on the surface in a great many parts but nowhere to any great extent and is very seldom mixed with any other stone Other parts much more extensive are covered with small masses of quartz among which are some smaller pieces of felspar, and some fragments of stones from the hills but the quartz

(200) i.e. Khor¹ chalk; marked Clay pits on the S. S.

(201) Khairi Pahar

(202) Dwarka H.

is by far the grand component part, and seems evidently to be the remains of a granite in decay, many of the masses still retaining the appearance of rock, but crumbling to pieces on a slight stroke of a hammer. The pieces are cuboidal and angular, and have no appearance of being water-worn. Among this quartzose soil, but not in continued rocks, are large masses of a fine middle-sized grained granite of a reddish felspar, white quartz and a black micaceous matter. The only other rock that I observed there, was in the bed of the Dwarka, where there was no appearance of stratification. The stone black with black shining specks, and white quartz, all very fine-grained, and probably containing much iron, as it is very heavy. Among the fragments of quartz, I observed lying on the surface many nodules with a glazed outer appearance, such as I mentioned yesterday, only they are larger, like walnuts or eggs. In some parts the surface of the ground was entirely covered with these enamelled concretions, but then they are always small. The soil in most places is light-coloured, but in some red, both with angular small masses of quartz intermixed, and I have no doubt that the whole is granite in decay. On beginning to ascend the hill the rock consists of grains of white quartz-like coarse sand loosely conjoined together by a rusty coloured substance, and has intermixed some larger patches of a brick colour. It is either a granite in a state of decay, or a stone now a second time forming from the debris of granite, but is nothing like what is called regenerated granite. It more resembles filter stone and by digging, masses for that purpose might probably be found. Farther up, the rock assumed a more decided appearance of being a reunion of debris, containing many fragments of quartz apparently water worn, and immersed in a friable mass of quartz grains, and a powdery white matter, which stains the fingers, and appears to me to be felspar in decay. Towards the top of the hill I could perceive little that I could ascertain to be rock; most was in fragments quite irregularly

scattered, though often of considerable size. On breaking them, they appeared mostly to consist of parallel layers, not separated by fissures, but closely united like the layers of some whet stones and often undulated like the veins of timber. These layers were of Khorī of a hard reddle called Gerī,⁽²⁰³⁾ of an ochraceous coloured stone of a similar substance, and of an aggregate stone consisting of small pieces of quartz immersed in one or more of the above matters. Some pieces showed the transitions of all these layers into one another. From the summit of the hill I walked about $\frac{1}{2}$ of a mile over plainish land to one of the quarries, from whence the Khorī is taken. It is covered by a horizontal layer of the last-mentioned aggregate stone from two to four feet thick, and entirely separated from the Khorī by a fissure. Under this the Khorī extends to an unknown depth and width. It is disposed in vertical plates running north and south, and from one to three inches thick separated by fissures containing reddish ochre. The plates are of very various shades of white. The whitest are selected and freed from the ferruginous matter of the fissures, and thus exported. There is another quarry about a cose farther on upon the hill called Purganj⁽²⁰⁴⁾ (see page 57A). From the quarry I had a fine view of the country. Patun⁽²⁰⁵⁾ or Rangaliya⁽²⁰⁶⁾ hill between which and Khorī pahar the Dwarka flows extended from west by south to west by north and is said to be two coses in length from north to south. Its width one cose. Beyond its south end I saw Kolong⁽²⁰⁷⁾.

Jogotpur⁽²⁰⁸⁾ the residence of a Mal chief named Kanaiya, is four coses north from the quarry on the southern bank of the Brahmanī. The road leads first between two hills. That called Jigriya⁽²⁰⁷⁾ bore

(203) I.e. *gers* red earth or red ochre.

(204) Apparently the Por Pahar of the S.S. 2 mi. N. by E. of Khairī Pahār. The reference within brackets is to the account given in the next but one paragraph below.

(205) Patun Pahar.

(206) Rangaliya is marked as a village at the eastern foot of the hills.

(207) Not named on the S. R.

(208) Jagatpur.

north-north-west distant half a cose from the mine which is at the west end of Khorī pahar Jigriya extends from east to west about two coses, but is narrow On the left of the road to Jogotpur is first Purgang,⁽²⁰⁴⁾ which bore north-north-west, $1\frac{1}{2}$ cose distant, and extends two coses from north to south, but is narrow Between Purgang and Jogotpur is another hill named Kajur Pahar ⁽²⁰⁹⁾ on which lives Chingra, a Patur⁽²¹⁰⁾ or Naib of the Mal On its east side below is Ramghur,⁽²¹¹⁾ the residence of another Mal chief named Sam Rai Ramghur is one cose south from Jogotpur, and east from the two places is a hill named Ranayī Pahar ⁽²¹²⁾ East from the quarry two coses is Gosaing Pahar ⁽²¹³⁾ at the west side of which resides Dherma, another Patur⁽²¹⁰⁾ of the Mal Down the valley between Khorī and Jigriya I had a fine view of the plain towards the Bagirati,⁽²¹⁴⁾ as far as the eye could reach, there being no hills in that direction

I then visited the villages of Mal on Khorī pahar. I saw five or six huts tolerably large, but very miserable The ridge is straight, one end is fenced by a wall of poles placed close upright, and in this the family sleep The other end is open at the sides, and serve as a kitchen, and for the cattle They have no furniture, and very little clothing, and everything about them is miserable and dirty They have, however, some sows, goats, and fowls, and their huts seem to be permanent I saw two plantain trees, but no other attempt at a garden They cultivate the field two years, and allow four years fallow Many of the trees on a field that had been only two years fallow were twenty feet high, yet most are cut when the field is cultivated They have nothing for sale but

(209) Possibly **Karakata Pahar**, NW of **Khejuria** village

(210) Apparently this is the Sans word *pātram*, 'receptacle', in the sense of a fit or worthy person, used here for an 'agent' or deputy

(211) **Ramgarh**.

(212) **Ranaipahari**, hamlet, (S S)

(213) **Gosainpahari**, village, (S S.)

(214) **Bhāgīrathī**.

charcoal and the Khari, and are far behind the Garos⁽²¹⁵⁾ and other eastern hill tribes in neatness, comfort, and skill

The Geri, which seems to me a much fitter substance for paint than the Khori is never found in large masses and is in general so much intermixed with other matter to which it firmly adheres, that it is never wrought. Small fragments that are found scattered on the surface separated from other matters by the progress of decay, and of a good quality, are sometimes gathered but it is not in much request. Gaur Khund, a dealer in iron, has taken the quarry of Khori at Purgang and has wrought it for six months during which he has exported five hundred mans 58/10/10 S W⁽²¹⁶⁾. It was never wrought before. He gives 2½ ser of rice of the same weight for each bullock load, about three mans, at the place where it is dug, to the hill people who dig it. He sends it to Murshedabad where and at Calcutta it is used as a paint. It sells for about 8 anas a man at Murshedabad. The dealer on the discovery of the mine, went to the Rani of Birbhum, and took a lease at seven R [rupees] a year. When he began to dig Lala Gaur Hari a person who had purchased part of Nuni,⁽²¹⁷⁾ the pergunah immediately adjacent on the south to the hills pretended that the property was his, and prevented the people from digging. The dealer then applied to Rada Chorn another person, who had purchased the Banhar and Gopmahal⁽²¹⁸⁾ of the forests of Nuni. He got a lease from him, but, I believe pays no rent. He then began to dig when the hill chief the real proprietor interfered and he took a lease from him paying 12 rupees a year.

The quarry of Khori pahar although situated on the hills which belong to the Mal, and which pay

(215) i.e. the Garos of Assam.

(216) The figures are doubtful in the MS. By SW Buchanan apparently means *Sikka* Weight, i.e. the ser being of so many *sikkas* of 170.666 grains each (see Prinsep's *Useful Tables*).

(217) *Nones* pergunah marked on Sharwill's revenue survey (1849-52) map of the Birbhum district due north of Burt.

(218) i.e. rights of collecting forest produce and pasturage.

no tribute, has been long wrought, and was considered as the property of the Birbhum Rajahs. It was sold as a separate lot to Lala Gaur Hari above mentioned. He sometimes works it himself, and sometimes lets it, paying 29 R a year to the company. They dig about one thousand mans annually, paying the same price to the hill people who dig it. Khori I take to be Petunse (219)

5th December — There being no practicable road from Chandrapur to Kalkapur, (220) the nearest Thana, passing through Bhagulpur district, I was obliged to proceed through the Virbhum territory to Gunpura (221) an iron aurung (222). About three miles from the Thanah I crossed the Dwarka at Doucha, (223) a large iron aurung standing on both banks of the river Gunpura (221) is about eight miles farther on, the country mostly overgrown with brushwood, kept down by the demand for charcoal. A copse is not reserved, until of a proper size, and then cut, but every man cuts a bush here and there, as he pleases. In one part it has been preserved, and the sal timbers are of a tolerable size, fit for small beams and planks.

6th December — I went to Narayanpur, (224) a very large iron aurung distant about eight coses by the direct road, that I came, through the copse. About three miles north from Gunpura I came to Damra, (225) another iron aurung in the Nankar (226) district. About a mile farther I came to a small torrent coming from the west and named Kuriyagati (227). About a mile beyond that, I came to another aurung named

(219) Also petuntse, from the Chinese *pai-tun tze*, a white earth composed of felspar and kaolin, used in China for the manufacture of porcelain.

(220) **Kalikapur**, now a suburb of Pākauri, on its eastern side.

(221) **Gunpur**.

(222) *Aurung*, a mart where an article of trade is manufactured or collected for sale or export wholesale.

(223) **Deocha**, on the south bank of the Dwārka N., about 3 mi SE of Chandrapur.

(224) **Narayanpur**, about 11 mi SW of Nalhati station (E I R Loop Line).

(225) **Damra**.

(226) *Nānkar* means an estate, &c, assigned for subsistence (Pers. *ndan bread*).

(227) The Ghagar N. of the S S

Massara⁽²²⁸⁾ situated in the same territory About two miles farther I came to Mollotti⁽²²⁹⁾ another aurung in the same district Its supply of iron comes from Maurola⁽²³⁰⁾ and Amri⁽²³¹⁾ situated in the woods north from it Between the two last aurungs I crossed a small torrent named Sargna⁽²³²⁾ About half a mile beyond Mollotti I crossed another torrent the Chauriya⁽²³³⁾ About 3 miles from Mollotti I had on my right a high ridge rather than a hill which is named Dumuriya⁽²³⁴⁾ It extends east and west for a little way In the copse here I saw many tracks of wild elephants of whom about forty are said to frequent the neighbourhood About half a mile on I came to the northern boundary of the Nankar, formed by a road leading west to Jogotpur About four miles north from Mollotti it was said that the mines of Amri and Maurola were at no great distance to the east From thence about $2\frac{1}{2}$ miles I came to the iron aurung called Beliya⁽²³⁵⁾ and passed $1\frac{1}{2}$ mile through that and the town of Narayanpur to where I expected my tents, but owing to the circuitous route that they had taken to avoid the woods, they did not arrive until an hour after me although they had set out on the preceding evening The people and cattle were worn out with fatigue having found no road We had been assured at the Thanah that the distance was only six coses and the people at Gunpura told us that the good road for carts was indeed six coses but that the short road through the wood, which I took was only five I took four hours to go it on a good elephant and my people assured me that their fine road was at least twelve coses, and consisted of paddy fields through the banks of which they had to cut their way My people have been so sickly, since I came into the low country, that I have been under

(228) Massara.

(229) Molluti.

(230) Mandula, some 4 mi SE. of Narayanpur

(231) Not on the S.E.

(232) The Chilla H. of the S.E.

(233) Marked but not named on the S.E.

(234) On the east side of village Dumria.

(235) Balla.

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the necessity of giving up the baggage elephants for their conveyance, and to put my tents on the little country carts,⁽²³⁶⁾ no adequate number of bearers being procurable.

Narayanpur is close to the Brahmani on its south side; so that several strange errors concerning this river have crept into Major Rennell's map.⁽²³⁷⁾

Having procured some of the people belonging to the zemindar of Sultanabad, they said that a passage through that territory towards the north, was impracticable for any kind of cattle, so that in order to reach Kalkapur I must proceed by Nelhati,⁽²³⁸⁾ situated about a cose north from the Brahmani where it receives the Tripatiya,⁽²³⁹⁾ and by the side of a rocky hill of small elevation.

8th December.—The Daroga of police here, probably not knowing exactly in what light to consider me, was exceedingly unaccommodating. He is said to be a near relation of the seristadar of the Court at Bhirbhum, on which account he considers himself as a great personage. I was therefore under the necessity of leaving behind a part of my sick, and many of them who were very unfit for enduring fatigue, came on without assistance, for being left behind is by all the natives considered as being left to perish. I went to Bilkati,⁽²⁴⁰⁾ about thirteen miles distance, but rather circuitous in order to avoid the rice fields. About seven miles from Nelhati I crossed a small channel called Ramgati,⁽²⁴¹⁾ and about two miles farther on, crossed the boundary of the Bhagulpur district, very near which my route has all along been. From thence I proceeded through the lands of a village belonging to Sultanabad, for about

(236) Here we obtain information as to how Buchanan travelled

(237) Buchanan refers to the B A map, and rightly notes that this area has been incorrectly delineated. A large portion of it had not been surveyed at all, as will be seen from Rennell's 5 mi = 1 in sheet.

(238) **Nalhati**

(239) **Tripita N.**

(240) **Birkheti.** The Berkati of the Revenue Survey map

(241) Not named on the S S, but it is the Ramghatee N. of the Revenue Survey map

a mile, crossing a torrent named Pagla,⁽²⁴²⁾ which winds very much and destroys much land. From thence I was led about two miles through a village belonging to Rajshai [*sic*], in the Bhirbhum district, my guides belonging to Sultanabad and taking me in a direction to avoid their rice fields although I should have done them no harm, but I rode on an elephant and they receive so much injury from wild ones that they were afraid. In the lands of this village I re-crossed the Pagla, and then went more than a mile through the lands of Bilkati on a high stony ridge most wonderfully excavated with small tanks, and having a fine rice country on both sides. By the way I passed the Dorga⁽²⁴³⁾ of a Pir in very neat order but of small size. It stands in the centre of a small citadel surrounded by an outer fort which is square with bastions at the corners. The houses in Bilkati resemble those of Rajeshayi, that is have a very short ridge with a pent all round. The walls in general of mud the soil being a very stiff clay. They are comparatively very comfortable, are tolerably clean, but have few trees or gardens as shelter. A vast number of small tanks round them the banks often planted with palmiras and occupying a great part of the high land which is seldom cultivated except where the tanks have been filled up as is often the case, when they are cultivated with rice. Most of them very dirty and offensive and the water excessively muddy. The native consider this as much better than the pure mountain streams and attribute all their sickness to the water they drank in the hills although it has been since our descending into the plains that they have been sick and the inhabitants of the low country are now extremely unhealthy and almost every family in lamentation for their departed kindred. The dirty tanks I look upon as one of the principal causes of this sickness.

(242) Pagla M. a name applied to many rivers and streams that follow a very winding course or are constantly changing their channels.

(243) i.e. dargah shrine.

9th December —I was under the necessity of halting at Bilkati in order to send for the sick. The sickness is much severer this year than usual, probably owing to the three preceding years of scarcity the crops this year are good, but have only just begun to come into use. Rice here is in the proportion of eighty to twenty-five for the same money with what it was in Belpata ten days ago. The distance not above thirty miles, but there is little or no intercourse between the places. I intended to go to Pachuari, ⁽²⁴¹⁾ and from thence to Kalkapur by the way indicated in Major Rennell's map, but was told, that the road to Pachuari is alone practicable, and that I should be under the necessity of returning by the same route. Half a cose beyond Mohispur⁽²⁴⁵⁾ there is no more cultivation, nor is there a single house at Pachuari. A Mal chief resides on the hill above. The country to Pachuari level. Towards the south there is a level country beyond the low hill called Molong,⁽²⁴⁶⁾ but it is entirely waste. A village was formerly at Pukoriya⁽²⁴⁷⁾ but it has been deserted on account of the elephants. Bilkati is a considerable village, and several of the farmers seem to be wealthy, distinguishing themselves like those of Dinajpur by digging tanks, and keeping small brick places of worship in neat order. Formerly iron mines were wrought on a stony ridge, where the old fort is, but they have long been deserted. The stone has a very singular appearance, resembling the brick stone of Malabar, and without the least appearance of stratification. On the ridge extending west from the stony rising, a vast number of tanks have been dug, as if there had been there a city, but there is no trace of buildings, nor any tradition of the place ever having been of note. In the clay thrown out from these tanks is some Gangot, and some of the enamelled nodules,

(244) **Pachuari**, on the north side of the Bānsloi N. Long 87°—32' E., Lt 24°—30' N. Patchwarry of the B A

(245) **Maheshpur**.

(246) Not named on the S S

(247) Pokharia is a common village name (the 'place of the tank'), but we are not told where the village was

besides others of a quartzose nature. The intention of the people here was to send me to Kalkapur by a circuitous route through the Bhirkhum district in order to avoid approaching their crops for there are no roads from village to village, and although all the rice is ripe yet the greater part will not be cut for a long time and is laid down to prevent it from shak- ing. As I should have done more harm by passing through Bhirkhum I persuaded in appearance the people to acquiesce in my passing through their lands, by the way of Askunda⁽²⁴⁸⁾ and sent notice of my intention to pass that way so that they might reap a passage where the fields were not cut, and where the little banks that separate the plots were too narrow for cattle.

10th December — Setting out early in the morning I observed that my precautions were totally vain no track was reaped yet I almost everywhere was able to pass without injury. The natives seem to be uncommonly shy, as men from every village were sent out to lead me round in order to avoid my seeing their houses although I should be obliged to go double the distance through their crops while there was a fair road through the village. After having proceeded rather less than three miles I came to a dirty stagnant creek called Bindoha⁽²⁴⁹⁾ which I crossed and about half a mile farther I crossed the Bangsnayi⁽²⁵⁰⁾ a pretty considerable sandy channel with a fine small stream of clear water. Soon after I learned that I was not to be taken to Askunda but that the tents, which I had sent on had been pitched at Burunga⁽²⁵¹⁾ in the Bhirkhum district, where accordingly I was obliged to go. It is about seven miles from Bilkati and joins immediately with Jaipura⁽²⁵²⁾ belonging to Bhagalpur which was not fifty yards from my tent. At Jaipura is a swelling ground like that near Bilkati, and consisting of a

(248) Askunda, just within the Pakour subdivision.

(249) Not named on the S.S.

(250) Bansiol M.

(251) Not marked on the S.S.

(252) Jalpur

rock without any appearance of stratification, which has a strong resemblance to the brick stone of Malabar, when hardened by exposure to air, and seems to be composed of clay and red ochre of iron. I call it a rock because in many places the masses are contiguous, and occupy a large space, but there is reason to suspect, that they nowhere compose a solid body. In one place the natives have, towards a side, made a long excavation, in order to dig out a red clay, which is intermixed with more or fewer of the masses of stone, to the greatest depth they have gone, which may be twelve or fourteen feet, the clay is evidently composed of the same materials with the stone, but whether it is the stone softened, or whether the stone is the clay hardened, I have yet to learn. I have however cut a brick of the clay, in order to try the experiment. At any rate this substance differs from that of Malabar, in so far, that beneath the surface and far excluded from the air, masses of it are interspersed, that have assumed or retained a stony form. The appearance of these masses, however, differs a little from that of the clay and superficial masses, having somewhat more the appearance of aggregate rock in decay. At the west end of the hill, immediately under the surface, is a mass of what I take to be iron ore disposed in parallel plates, which are separated from each other by considerable quantities of red ochraceous clay. The natives dig clay from both places, in order to paint or rather redwash the walls of their huts.

11th December —I went to Thanah Kalkapur. For about five miles I passed through Bhirbhum, leaving Sultangunj⁽²⁵³⁾ to my left. Part of the road over a low ridge with a fine soil totally neglected, and covered with brushwood. I then passed two-thirds of a mile through a village of Amar⁽²⁵⁴⁾ on the south

(253) Read Sultānābād, the southern *pargana* of the present Pākaur subdivision. There were no roads from north to south in this *pargana* till some were made by Mr. McLeod Smith in comparatively recent times.

(254) By "of Amar" Buchanan means pertaining to the *pargana* of Ambar, the northern *pargana* of the present Pākaur subdivision, the "Awmore" of Rennell. The village in question was probably Hamrol.

side of the Sibgunj nullah ⁽²⁵⁵⁾ just where it becomes navigable in floods. Merchants were here collecting fire-wood to be floated down to Murshedabad next year. The quantity now pretty large, by the season it will probably be great. The nullah is a dirty puddle. I then passed for two-thirds of a mile through a fine rice plain, of which ten bigas belong to Rajshayi, and ten to Amar. I then went through the latter district for $1\frac{1}{2}$ miles, when I entered the division of Thana Shumshergunj, ⁽²⁵⁶⁾ a part of Aurrungabad ⁽²⁵⁷⁾ also being near. About $1\frac{1}{2}$ mile farther on, I came to Amar and the boundary of Kalikapur and from thence to the Thanah is about an equal distance. The huts as in Birbhum all of clay with four sides thatch and short ridges.

13th December—I went about twelve ⁽²⁵⁸⁾ miles west and then returned in order to have a view of the hills and waste country, as all the people belonging to the Sezawul declined coming to see me. Passing west about a mile from the Thanah I came to Pokori, ⁽²⁵⁹⁾ where the zemindar of Amar, Prithi Chund Sahi, resides. He is a stout sensible and obliging man, who not only visited me a civility that very few deign to show but invited me to visit him. His house is decent, and is gradually enlarging. He said that the expense of clearing the wastes would exceed the profit but in this I have no doubt he is entirely mistaken. Pokori is a good village, surrounded as usual by many wretched tanks and very unhealthy. All beyond it towards the west, is nearly a desert that is on the plain for the hills on both sides seem as much cultivated as the manner adopted will admit. These however, occupy but a small part of the country, for about fourteen miles in a direct line west from the zemindar's house. So far they probably do not exceed one-sixteenth or one-twelfth

⁽²⁵⁵⁾ The Machna M. of the S.B.

⁽²⁵⁶⁾ Shamsherganj, near Dhullan

⁽²⁵⁷⁾ I.e. of tháná Aurrangábád. Buchanan seems to have followed a circuitous route.

⁽²⁵⁸⁾ But the details given make it 14 miles.

⁽²⁵⁹⁾ Pakaur

of the country. In many places I saw old tanks, the traces of former cultivation; but the period must have been remote, as all traces of rice-fields are obliterated, which in a soil remarkably stiff, would require a lapse of several ages. About five miles beyond Pokori, I came to Horipur ghat, a passage over the Patergota or Duapara,⁽²⁶⁰⁾ a small stream, which has sunk a very deep channel, in a black rich deep soil. About $1\frac{1}{2}$ mile beyond that, I came to a village inhabited by Bhuias, who seem to have many cattle. It belongs to the zemindar; about $6\frac{1}{2}$ miles farther I came to Deoguriya,⁽²⁶¹⁾ where the Kacheri of the Sezawul's Naib of Amar is situated in a village inhabited by his peons, all of whom have lands free of rent for a support. They are Muslems, Bhuias, Rajputs, etc. and most extraordinary miserable. Their lands almost totally neglected, and they sickly and wretched. They seem to rear nothing more than will absolutely keep them alive. They are probably squeezed by the Naib, who was absent, nor had I any intercourse with the hill people. The people said that they subsist chiefly by cutting timber, and in fact I saw near the village many small posts, twelve or fourteen feet long and four or five inches in diameter, and many small planks about five feet long, one wide, and two inches thick; and I met a good many of them going on oxen to the market at Kalkapur.

The low hills near my route, on both sides, seem not to be stony, and consist of red soil. I saw no rock by the way, but several of the eminences are stony. The stone is a kind of hornstone (*Lapis corneus*, Wall), that is, has an earthy grain, flinty fragments, is not hard, as a knife scratches it leaving a white mark, but it is extremely tough. I saw

⁽²⁶⁰⁾ None of these names are traceable on the S S

⁽²⁶¹⁾ Buchanan writes Deoguriya, but there is no such place marked on any of the maps. It is just possible, judging from the distances and direction given, that he went to the Domureea of Sherwill's 1848-50 sheet (the *Dumria* of the S S). It is also possible that this was the *Dunyamarrah* of Rennell and the *Duniamara* of Tassin (1841) but it is not possible, with the maps available, to follow Buchanan's route on this day.

one deer to-day The only one yet observed in the district I only had a glance of it, so as to be unable to determine the species

All the hills to the south of my route are occupied by the Mal Those to the north by the Moller The people here have no intercourse with Jumna Horina pahar⁽²⁶²⁾ near Kurariya⁽²⁶³⁾ but frequently go to Deagor⁽²⁶⁴⁾ making the following stages, Dosaugora, Pakorikuta, Surmi Kenduya⁽²⁶⁵⁾ The road in some parts over hills, but practicable for loaded oxen of the hill breed, which are much stronger than those bred on the plains I cannot trace among them Duniyama Barandee Colego, Denga, Lukersura, Gagur, or Tiliyapara⁽²⁶⁶⁾ of Major Rennell

A Bhuiya who is interpreter at Deoguriya and very well acquainted with the country knows nothing of the Beor or Onwars⁽²⁶⁷⁾ He calls himself a Ghatwal Bhuiya says he has a kind of Brahman for Parohit He has no communion with the Hill people and abstains from beef His wife and children speak Bengalese He can eat with the Kumar but not with the Desi Bhuiyas who speak the Moller language and eat beef They seem to be the same with Beor Bhuiyas but are called by a different name The Ghatwal Bhuiyas intermarry with the Kumar pal and in fact are the same caste only settled in the low country

15th December—I went to Aurungabad⁽²⁶⁸⁾ about twelve miles All people agreed in calling it five coses, but on setting out I soon learned that a

(262) Near Jamnipharpur

(263) Karharia.

(264) Deoghar

(265) i.e. due west to Dasgara, and thence west by south through Surmi and Kendua.

(266) All these names are marked on Rennell's *B. A.* Pl. II, but three of them (Denga Lukersura and Gagur) are not marked on his earlier larger scale sheet which shows that Buchanan was using the *B. A.* plate.

(267) See notes (116) and (186) above.

(268) Once a place of considerable importance and prior to 1856 the headquarters of the subdivision, now at Jangipur It was the principal centre of the blanket weaving industry carried on by up-country Gararia. The name however, does not appear on the 1 in. = 1 ml. S.S. and Rennell's and Tassin's maps have to be referred to!

route had been prepared for us, that would be at least sixteen miles, and the loaded cattle and people were under the necessity of following that, there being no vestige of a road. I went by the straightest line I could follow, and certainly went at least twelve miles from [i.e. between] the two Thanahs. For about two miles from Kalikapur the country continues high. Afterwards it becomes very low, with swells at a great distance from each other. On these the villages are situated. They are large and tolerably comfortable for this country, and are finely shaded with trees and bamboos, as is usual in Bengal. The intermediate spaces are bare, and look ill, owing to the extreme negligence with which they are cultivated, but seem capable of great improvement as the soil is uncommonly strong. Rather less than three miles from Kalikapur I crossed a small creek separating from the Kama,⁽²⁶⁹⁾ and about $3\frac{1}{2}$ miles from the Thanah I came to its principal branch, which is a dirty stagnant nullah of considerable size and muddy bottom. It forms the boundary between Lakerdewani and Shumshirgunj, the latter of which in a great measure surrounds Aurungabad. About eight miles from Lakerdewani,⁽²⁷⁰⁾ I came to another nulla named Madooh Jani, more dirty but not so large as the Kama. The sick had been sent on yesterday, in order that the bearers might return for my principal people. On my arrival I found that one of them, a porter, had died this morning after three days' illness. He had from the first been speechless. Two others, a Seapoy and a Lascar, extremely ill.

17th December — I went one coss south to see Mohisali⁽²⁷¹⁾ tank. It extends east and west, but by the people of the vicinity is said to have been dug by Mohes Raja, a Tiur,⁽²⁷²⁾ who governed these parts, and the Tiur Rajbongsis, numerous in these parts,

⁽²⁶⁹⁾ Apparently the **Machna N.** of the S.S., but it is not possible to trace the "Madooh Jani" mentioned further on.

⁽²⁷⁰⁾ i.e. the Division of Lakardiwānī

⁽²⁷¹⁾ **Mahisal.**

⁽²⁷²⁾ Tiur, a boating and fishing caste found chiefly in Bengal and Bihār. Risley called them "Dravidian" (*T & Q*, II, 328)

are descended from his connections. A sib on the south side of the tank receives two pujas from the adjacent zemindar.

18th December — I went first about a cose to see Mongolpur (273). The ruins consist merely of a number of small tanks and broken ground, such as are usual about towns in Bengal. The extent pretty considerable but not like that of a city. The tank at Basdiopur (274) is about one cose west from Jivat Lokhor (275). It extends north and south. The people near it say that it and the tank at Mahasali were dug in one night by Vasukurma (276). The country in the direction of these tanks very fine, and tolerably high. Much sugar-cane, orrhur, and mulberry. The sugar mill short seven earthen and one iron boiler in the furnace.

During my stay at this place three men have died, but they were past all hope of recovery, before I arrived. The other sick seem to be recovering.

21st December, 1810 — It rained most of the time I was at Aurungabad, and on the 19th very heavily and incessantly so as to impede my business greatly. This morning I went to Thana Shumshirgunj (277) which is about six miles from Aurungabad. I followed the great road for rather more than four miles, until a little beyond Sibpur where a native has a neat indigo factory of eight pair of small vats. They are open above but the boiling house and a curing house are of brick. He has built near it a very neat brick house of one storey after the European fashion small but in good proportions. For about $2\frac{1}{2}$ miles I kept near the nullah which passes Aurungabad. Having crossed this I then followed the course of the Kalapani, a large nullah until I left the great road. Near the Thanah of Shumshirgunj I recrossed the

(273) (274) and (275) Not marked on the S.S. The features of this part of the country have been greatly altered since Buchanan's time owing to the shifting of the rivers.

(276) Vīśvakarma the architect of the gods to whom so many wondrous works are attributed.

(277) Shumshirgunj now a southern suburb of Dhulian.

same nullah, which I had before passed⁽²⁷⁸⁾ It was called by two names at the two places, neither probably right

Shumshirgunj is a large straggling place, a part of the town though called by a different name belongs to Aurungabad

25th December—I went to Thanah Furukabad⁽²⁷⁹⁾ having to my right a creek almost the whole way, at no considerable distance About a mile and a half from Shumshirgunj I came to Kornpara⁽²⁸⁰⁾, where there is a small tank, but no other remain of antiquity that I saw A little beyond it is Deonahat⁽²⁸¹⁾, a market place partly in three Thanahs, although the number of houses is very inconsiderable The houses for the accommodation of strangers are like those at Aurungabad Here I rejoined the great road, which is not raised, and is very bad even at this season Some pains are taken to make bridges or banks on the water courses, with sticks and earth, but they are incapable of supporting an elephant About four miles from Deonahat I crossed the Baniyagong⁽²⁸²⁾ nullah at an indigo work It is a small stagnant channel, but deep and miry The river into which it falls is even now navigable for small boats, and much fire-wood is lying on its bank, ready for exportation Faruka is situated on its bank above three miles above the junction with the Baniyagong nulla In all about nine miles from Shumshirgunj

29th December—I went to Beloyari⁽²⁸³⁾ in order to have a view of the hills My route west, but the

(278) A reference to Rennell's *B 4* Pl XV, where Callapanny Jeel is Buchanan's Kalapani, will help to explain Buchanan's route The configuration of the area has vastly changed since

(279) **Farakka**, the Furruckabad of Rennell, and possibly the Ferrandus of Lavanha's map (c 1550)

(280) Not on the S S the site has been diluviated

(281) The Deonāhāt (and Deonāpur) of Buchanan—the Downapoor of Rennell and other early maps and records—lay some two miles north of the modern Dhulīān The site has since been diluviated in the course of the shifting of the main stream of the Ganges

(282) **Boniagram** see Rennell's *B 4*, Pl XV for this nālā and the river into which it fell—an old branch of the Ganges, which has again filled it since

(283) **Bilabari**, on the spur of the hills (Gādā Bhūta Pahār of S S) nearest to Farakkā, and about 2 mi NW of Barharwā

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(283) **Bilabari**, on the spur of the hills (Gādā Bhita Pahār of SS) nearest to Farakkā, and about 2 mi NW of Barharwā

road rather circuitous I went in all about twelve miles near the Guman Merden⁽²⁸⁴⁾ river. About $2\frac{1}{2}$ miles from Feruka, I came to the place where the nullah that passes Baniyagunj separates from the Guman Merden. To the boundary⁽²⁸⁵⁾ of the Raj mahal Thanah is about $3\frac{1}{2}$ miles. About six miles from Faruka I crossed the Guman Merden a deep narrow channel navigable in the rainy season. Furukabad is but a small village and is chiefly inhabited by Betiari⁽²⁸⁶⁾. On the way I passed several large villages but Beloyari is only a small place and has no shops. Each house has a very large shed for cattle. The people two nights ago were much alarmed by a male and two female elephants, which broke down a hut and ate up the grain contained in a Kuthi⁽²⁸⁷⁾.

The Sirdar of the neighbouring hills came with the native most conversant in these parts but both were uncommonly stupid. Formerly there was on the banks of the Gumon Merden, where it leaves the hills a fine cultivated country belonging to the Monihari⁽²⁸⁸⁾ zemindar near Bhagalpur and between the Rajmahal Perganah and the hills. It is now deserted and only one village of Ghatwals in a miserable state remains. Almost the whole way between Beloyari and the boundary of Amar has already been deserted. The hills on the contrary are as fully occupied as the nature of their cultivation will admit. Those near are not broken nor rocky nor are they of considerable elevation but they are very steep.

30th December — The wild elephants alarmed the people of the village at night. The men had taken refuge in the trees and the women in the cow houses. I went first about eight miles to Atapur⁽²⁸⁹⁾ through a country very indifferently cultivated and which is probably kept waste by the Nawab's elephants.

(284) Gumanī also called the Gumāni Mardān.

(285) Farrukhābād was then in Rājshāhī district.

(286) i.e. *bhāṭiyārī* inn keepers.

(287) i.e. *kāṭī*, diminutive form of *koṭā* a granary.

(288) The Monihārī zamindārī is marked on Buchanan's map (q.v.)

(289) Atapur; the Houtapour of Rennell.

Atapur is a large poor-looking village. A little beyond it, the ground rises into little hills, which extend from the mountains near Uduya nullah⁽²⁹⁰⁾ to a large jhil or lake, and, where I crossed them, perhaps $1\frac{1}{2}$ mile wide. They are mostly fit for cultivation, but almost entirely neglected, and are of very inconsiderable elevation. The highest part rising into a rocky peak is named Munsachondi⁽²⁹¹⁾ from the deity supposed to reside on its summit, which may be about a mile from Atapur. The rock has no appearance of stratification, and has a strong resemblance to that at Thanah Moniyari in Purniya, and to the indurated clay which I saw between Bilkuti and Kalikapur. It does not effervesce with the nitrous acid. In the face of the hill a deep pit had been dug, and the people said that about forty years ago Kori⁽²⁹²⁾ mati, for writing with, had been dug from the pit, but the operation had been supposed offensive to the deity of the hill, and the miners had gone among the infidels of the mountains, who had no gods that were troublesome, and they continue to dig the Khorī from Gudayi Tunga,⁽²⁹³⁾ north-west from Munsa Chondi about $1\frac{1}{4}$ cose. This hill belongs to Guīya Majhi, also the proprietor of Chilpahar,⁽²⁹⁴⁾ $1\frac{1}{2}$ cose west from Munsa Chundi. From this sacred hill I went across hilly ground for about $1\frac{3}{4}$ miles, when I came to a plain covered with long grass. In August when Uduya nullah was taken, it is covered with water, but at this season is a firm clay overgrown with long coarse grass, although very much fitted for the cultivation of rice. The only water remaining is in a few scattered holes in what Major Rennell calls the lake,⁽²⁹⁵⁾ which is three or four hundred yards wide, and about eighteen inches deep, covered with floating weeds formed into

(290) **Udhua Nullah**, the scene of Major Thomas Adams' victory over the forces of Qāsim 'Alī Khān on the 4th/5th September 1763

(291) ? **Manasā Chandī**, not named on the S S, but it is the small isolated hill adjoining village Birāmpur on the north

(292) i.e. *khari*, chalk

(293) **Gadai Tangi Pahar**. It was from this neighbourhood that the stone for the bridge across the Ganges between Damukdia and Sārā was quarried

(294) **Chilpahar** (hamlet) is marked on top of the hill (S S)

(295) See B A, Pl XIX

a mat It seems to run parallel to the low ridge of hills which I crossed from Uduanala to the large jhil at their south end From this ridge to Futkipur is about two miles

1st January 1811 —I went to visit the hill called Gudoya Tongi which is the residence of Guyiya Sirdar a chief of the hill tribes, and where there is a mine of the Khorī matī The foot of the hill is about seven miles from the Thanah of Futkipur ⁽²⁸⁶⁾ which stands near where the right wing of the British camp was stationed during the attack of Uduya nullah I first went west over a deserted plain for about two miles, when I came to the boundary of the Rajmahal division In this direction the lake laid down by Major Rennel has totally dried up A very little beyond the boundary I crossed over the skirts of a low ridge extending south from the hill that was stormed to Munsa Chandī in some places high in others low, but about a mile wide where narrowest and lowest as where I crossed it The soil is a red clay intermixed with many stones, and these in some places are closely compacted in large masses like a rock in a state of decay They consist of a kind of breccia composed of rounded pebbles of various sorts united by a pale bluish cement Beyond this ridge is a fine rice country extending to Atapur Guyiya Sirdar rents a farm on this ⁽²⁸⁷⁾ and from thence I was joined by his eldest son a fine young man who said that his father was away from home Rather more than a mile from the bottom of the hill the land rises into swells covered with low coppice wood The soil rich and mixed with the calcareous concretions called Gangot The hill is exceedingly steep of ascent but the whole is cultivated after fallows of about four years and gives about three crops before the next fallow The

⁽²⁸⁶⁾ Phudkipur; but Gadāī Tāngī hill is under 5 mi. from the present site of Phudkipur so the Ganges has probably encroached here also.

⁽²⁸⁷⁾ It is very interesting to read that one of the Saurīā sardārs at that time rented cultivation on the plains. Mr Allanson thinks they are too improvident nowadays to be able to do this. *Saba* grass is now extensively grown on these hills and this industry at present forms the chief support of the Saurīā Malers.

soil is strong, but perfectly filled with stones, and in some parts the rock comes to the surface. The great crops Sorghum, maize and cotton. The latter is now in seed, and remarkably luxuriant, even among the crevices of the rock intermixed with a little soil. In some places are a few bamboo trees scattered with plantains and bamboos, but nothing else like a garden. I ascended the hill between a part projecting towards the north-east, and the highest hummock of Gudayī Tongī. The rocks here, and on the greater part of the hill have no appearance of stratification, but appear to me to be what is called Trap, whin, or basalt in irregular masses very tough, fracture imperfect conchoidal, earthy gray blackish colour with some small fragments of quartz interspersed. Among the broken fragments of this rock, towards the foot of the hill, I found some pieces, all sporadic, apparently, in different stages of change towards the nature of agate, and some of them were encrusted on the surface with irregular crystals. Among these also I found some sporadic pieces of badly-formed whitish Chalcedony, approaching to that brought from near Hyderabad, and their surface pitted in the same singular manner.

Having reached the summit of the hill, I went about a mile round the highest hummock to see the mine, leaving the village to my right. A rock, or large mass, I am not certain which, near the mine differs much from the others that I saw on the hill, and consists of a reddish, slaggy matter, internally containing many cavities, some of which are enamelled within and lined with what I take to be iron ore. It has much resemblance to the rock near Birkutī &c. The mine is situated on the west side of the high hummock, and seems to occupy a considerable space. The workmen sink an oblique descent perhaps four feet wide, until they come to the vein or stratum of Khorī Matī, which they say may be four or five cubits thick, and as much wide, but I cannot be certain of understanding them right, for they are now only beginning to dig, and have not formed their mine more than twelve feet deep, and they do not expect to reach

the Khorī until they are as deep again. They then work as much of the Khorī as is required, often going underground ten or twelve yards. Nothing is found above the Khorī but a rich red soil from twenty to thirty feet thick. In the following rainy season the mine fills with water, and the roof falls in so that a new mine is made every year. A merchant hires the hill people to work, and gives them four annas a day. The Kori mati here is different from that near Chandrapur⁽²⁵⁸⁾ and more resembles the coloured matter found on the south face of the hill, some of it consisting of parallel layers of various shades of red and yellow curiously twisted, while much is reddish, like the Gheri mati of Chandrapur but the whole is softer being nearly like chalk. It seems to be an indurated clay having a greasy feel and polishes by rubbing it with the nail. One piece had on its side the appearance of a bivalve shell, but if really such so much decayed as not entirely to satisfy my mind concerning its being an animal exuvia. I searched in vain for any other similar appearance. This Khorī mati is eaten by the women of the neighbouring districts, just as baked clay is used by those near Calcutta and some of it is sent even to that place. Having examined the mine, I went to the village, where I found about twenty families their houses disposed in two rows. I walked through the lane to the end from whence I had a most noble view commanding Rajmahal due north with a large lake between, &c &c. I was accompanied by the young chief and a mountain guide employed by the post office, and had only two servants with me totally unarmed so that I could be no object of fear but all the men staid in the house and most shut their doors. The women and children came out to look at me but declined any conversation, although the young chief said that they all spoke the low country language. I endeavoured to go towards two or three parties but they all retired on my approach except one young woman, who had a good deal of

(258) i.e. at Khairi Pahār which Buchanan visited from Chandrapur see above under date 4th December

reason to be satisfied with her appearance, being very well looked. She allowed me to approach, and to pass her, standing with a becoming but modest confidence, but declined conversation. I then went to the chief's hut, in hopes that he would show some marks of hospitality, being very thirsty from my walk in a hot sun; but I was quite disappointed. He had three huts, I sat down on a stone near the chief hall, the doors of which were open. After waiting for some time, and talking with him on indifferent subjects, in hopes of an invitation I looked in, and saw that the hall was about thirty feet long by twenty wide. The roof well thatched, and supported by wooden posts. The walls of reeds, without plaster, but very neatly secured by split bamboo, and much superior to any hut of a wealthy farmer, or small zemindar of the low country. There was a tolerable neat place for cooking near one end. The furniture consisted of several coarse cots, without mattresses or curtains. A hammock of net, probably the bed-place⁽²⁹⁹⁾ of the master, and some earthen pots. There was a door at each of the sides of the hut, one leading to a yard neatly enclosed with reeds. Several other houses seemed to be nearly as good as that of the chief, and none of them bad. Their store houses are oblong huts raised on wooden posts. Four or five serve for the whole village. Their pig-styes occupy the rear of the village, and are well occupied. Their cows and oxen are fed in the woods below, and a considerable space on both sides of the hill is claimed as property by these mountaineers, but it is not at all cultivated. The

(299) At p 43 of his Revenue Survey Report, under date 22 January 1851 (see also *JASB*, 1851, p 572), W S Sherwill, describing the interior of a house at village Jola (the Jolo of his map and the Jallo Paharia of S S 72 P/6) writes

“Across the hut was hung a grass hammock, in which the hill people sleep during the rainy and shot seasons”

From such inquiry as I have been able to make, it seems that this practice is no longer common. Hammocks are not used for this purpose by the plains folk in Bihār.

Mr H Ll Allanson notes in regard to Buchanan's description of this hill chief's house “The superiority of the sardār's house over those of the plains is no longer the case. It is just the reverse. It is clear from the whole description of these people that they have deteriorated since”

children are nearly naked, and very dirty. The women fully as well dressed, and as clean as the peasantry below, and they had many more ornaments of tin and brass. Finding the people totally inhospitable I returned by the same way I came.

2nd January — I went to the Singghī Delan⁽³⁰⁰⁾ in Rajmahal. From my tents to the bridge across the Uduya nullah⁽³⁰¹⁾ is about $1\frac{1}{2}$ miles. Since 1763, when the lines built by Kasimālī were forced by the British troops, the river has carried away all the old fort except the bastion towards the south west. Since that the river has retired again and this bastion is now at least two miles from the bank. The new works of Kasimālī make now a very sorry figure, and the plan as represented by Major Rennell can only be traced in some parts. The bridge is but a very sorry work although the largest that I have seen in Bengal. It consists of three small clumsy gothic arches over the middle one on each side of the parapet, is a narrow open gallery with a turret at each corner. This would have had a tolerable good effect had the structure been tolerable. The galleries, although built of brick are supported by wooden beams. The road on the bridge is wide but steep and the pavement is exceedingly rude.

From Uduya to the Singghī delan is a very dismal country. For about $2\frac{1}{2}$ miles the country is totally waste and overgrown with reeds although the soil seems very rich. For the remainder of the way (almost two miles) the road is through suburbs of Rajmahal, that is mango plantations, half wild with

(300) Sangī dīlān or stone hall said to have been built (about 1592) by Mān Singh, who transferred the capital of the province (Bengal) from Tāndā to Agmahal, as it was then called, changing the name to Rājmahal and afterwards to Akbarnagar in honour of the emperor. See also Appendix 2.

(301) For a view of the old bridge drawn probably in 1781 see William Hodges *Select Views in India* 1786. In the *S. P. Gazetteer* (1810) it is stated that one arch of the bridge was still standing. Buchanan in his *Index of Native Words* spells the name. उदयानाला. The meaning of the first part (Udhvā) has not been satisfactorily determined.

For the best account of the battle see A. Broome *History of the Bengal Army* 1850 pp. 380—86 and for a plan of the battle field Rennell's *B. A. Pl. XI* (reproduced by Broome).

huts on each side of the road, rather miserable, and very little cultivation

3rd January — I went to see Nageswar vagh,⁽³⁰²⁾ which is about four miles south-west from Singhi Delan · passing through a bazar for about half a mile, I came to plantations very much neglected, which extend for near two miles. Among them there are many scattered houses, especially of those who sell palm wine. About a mile within the wood is a mosque of some size, named Abdulla Musjid, built by Gonesyam the zemindar, who on his conversion, took the name of Abdulla. Near it is a market place called Imamgunj and the house of Imam Bakhs, one of his descendants, which is not at all respectable. From thence, onwards for a mile, I had a lake to my right overgrown with aquatic plants. Much of it cultivated with Spring rice. On the south side of this are the ruins of a country seat called Phulbagh⁽³⁰³⁾. It has consisted of several brick houses of no great size, and at a considerable distance from each other, with a large mango plantation near it. On the whole it has been a place becoming a man of rank, each of the houses being about the size of such as are usually occupied by our zillah judges. No vestige of elegance. The people with me said it was built by Sultan Sujah, but others say it belonged to Hussain Ali Khan, who was Phaujdar since his time. A little beyond the Phulbag, and at the end of the plantations is the tomb (Mokbera)⁽³⁰⁴⁾ of the widow Begum of Mohabut Jung. Others say the lady belonged to a Nawab of Dakha⁽³⁰⁵⁾. On more full enquiry I find, that the lady was Bukht homa,⁽³⁰⁶⁾ widow of Amirulumra

(302) Nāgeśvara Bāgh, "in which the only remains of a garden are a few mango trees and two wells, which supply excellent drinking water to the people of the locality" (*Gazetteer*, 1910, p. 275)

(303) **Phulbag**, correctly Phūl bāgh, 'flower garden', called "the Phulbārī and the zanāna buildings of Shah Shujā" in the *Gazetteer* of 1910 (p. 275). Buchanan, with greater probability, describes it as a "country seat"

(304) i.e. *maqbara*, a 'burial-place'

(305) Dhākā, *anglice* Dacca

(306) *Bakht-i-humā*, one 'whose good fortune has been conferred by the lucky phoenix'. Shayista Khān was the son of 'Asaf Khān, and so brother of Muntāz Mahal, 'the Lady of the Tāj', and uncle of Aurangzeb. He succeeded Mir Jumla as Governor of Bengal

Shayesta Khan a Musaeef⁽³⁰⁷⁾ of the king in the reign of Aurungzebe It has been a handsome building A square space of about three acres is surrounded by a fine brick wall built as usual with many arched doors filled up At each corner is an octagon building, with eight windows in an upper storey, and covered by a dome In the middle of the south side is a fine gate covered with a dome In the centre is the tomb, a square building with a gallery of three arches towards each front, and a small chamber at each corner There is a small minaret at each corner, and the centre hall, in which the grave stands is covered by a brick dome At each corner is a smaller dome of wood above a small chamber of the same materials with eight windows The cornice, upper part of the minarets and the four wooden domes are painted with very bright colours The cornice in particular is ornamented with a row of paintings of a fine blue iris done exceedingly stiff The garden overhanging the lake is quite slovenly as everything about the place is, and is fast going to ruin although there is a Khadim,⁽³⁰⁸⁾ who has an endowment From thence a close-built village named Gudaganj⁽³⁰⁹⁾ extends about three quarters of a mile to the (Mokbara) monument of Mirza Muhammad Beg, Suba of Bengal⁽³¹⁰⁾ and father of Mohabut Jung or Alaverdi Khan That is according to its keeper but no exact traditions remain The wall is like that of the Begum's monument, but the buildings within have not been so splendid The village extends about half a mile farther, and from thence to Nageswor bagh is about half a mile fine high open fields This palace was built by orders of Kasim Ali⁽³¹¹⁾ but was not quite finished when he was

(307) Though clearly written musaeef in the MS this is probably intended for *muqārib* companion favourite The word *musaeef* / neighbouring is not used in this sense.

(308) *Khadim* a keeper literally servant

(309) *Gadaganj*

(310) There is some confusion here The words Suba of Bengal ought to follow after Mohabut Jung The MS. text has been corrected by Buchanan as now printed; but Mirza Muhammad the father of Ali Vardi Khan was never *subadar* of Bengal.

(311) Qasim Ali Khan, Nawab Nā'im of Bengal 1760—63.

obliged to abandon the government. It has been a great building, but very destitute of taste or convenience, and seems to have been intended entirely as a seraglio or place of retirement for him and his women. It consists of a wall of brick, perhaps thirty feet high, and five hundred feet square. The gate was at a corner where there was an outer oblong space surrounded with a wall and containing some apartments for guards. Within the wall was a row of miserable small courts surrounded by still more miserable dark hovels for the women and their attendants. This row went round the four sides of the wall. In the centre of the area was the painted hall (*Rung Mahal*),⁽³¹²⁾ a square building supported by wooden pillars, much like Hyder's garden palace at Seringapatam, but much smaller. There seems to have been a walk round the terrace, by which the female apartments were covered, and there are many small irregular windows or loopholes near the top of the wall, through which the women walking on the terrace might see the country. The outside of the wall has been surrounded by a row of sheds or low buildings now totally fallen, which served for the male attendants. The Durbar and public offices were to have been built at some distance. Although it is only fifty seven years since this palace was built, the whole is now a most complete ruin, most of the roof fallen, and many of the walls. It was never inhabited, nor any care taken of it. The officers of a battalion of sepoys quartered in it for some time. It was then in good condition, but on their leaving it, the Rajmahal Nawab, Rukonath Dowlah,⁽³¹³⁾ removed many of the materials for his buildings. The situation is very fine indeed, the whole land between the two lakes being very high. The palace occupies a slope descending towards the southern lake, which in the rains comes within twenty-five bighas of the wall. Beyond the lake are some fine woods and plains and then the hills. In the dry season the water retires

⁽³¹²⁾ *Rang mahal*, 'pleasure apartment'. The original meaning of *rang* is 'colour', a secondary meaning is 'mirth', 'pleasure' and such apartments were specially decorated.

⁽³¹³⁾ *Ruknu'd-daula*

far, but the water has not much Dam or Dhol, ⁽³¹⁴⁾ and the land which it leaves is cultivated with Boro rice

4th January —I examined some of the ruins in Rajmahal. The Singgi delan⁽³¹⁵⁾ or stone hall, was built by Sultan Suja brother of Aurungzebe, while that prince governed Behar and Bengal. In the early part of his government he seems to have resided at Gaur. In the ruinous state to which it has been reduced no adequate notion can be formed of what this palace has been, part has been undermined by the river and fallen into its channel, and also part has been entirely removed and is now occupied by the town for there is not the smallest trace of the wall by which the whole was undoubtedly surrounded total exclusion from view being the principal object in all native houses. Still however, enough remains to show, that the palace has been of very great size and in that respect suitable to the high rank of the prince, by whom it was occupied. It seems to have consisted of a number of houses appropriated for different purposes, sometimes totally unconnected with any other building and sometimes joined by open galleries or arched ways. These houses seem to have been narrow but most of them consisted of two storeys, the lower very low in the roof and divided into many very small apartments probably for servants. Each of the larger buildings in the upper storey in general consisted of three rooms. A large hall in the middle and a smaller room at the end. In most places these apartments seem to have been well ventilated with two rows of windows one descending to the floor and the other above that small. The apartments of the under storey seem to have been not only low and small, but very dark. The Dewan Khana⁽³¹⁶⁾ was perhaps the place of greatest state and is the most entire

(314) These words are quite clearly written thus in the MS. What Buchanan meant, is a matter for speculation.

(315) Buchanan gives a similar account of these ruins with a plan and drawings in his Report. See *Martin's E. I.* II 70 f. Bihār was really a separate *suba* at that time. Cf. *Bādshāhnāma* ii, 136.

(316) *Dewan Khana* royal court, or hall of audience

having been roofed in by Mr Dickson,⁽³¹⁷⁾ and still serves as a treasury. It stood on the back part of a terrace, two hundred and ten feet ten inches by one hundred and seven feet five inches, and elevated about four feet. The hall in front, where the Prince sat to give audience, is eighty-six feet eleven inches long by twenty-five wide, and about twenty feet high in the roof. In front are five arched doors ten feet seven wide, and at each end is another of the same size. This house is double, but only one storey high. The hinder part was twenty-three feet two inches wide, and divided into three apartments. That in the centre, forty-nine feet four long, with one low but wide-arched door, and four smaller ones with small windows over them towards the front hall. A wide but low-arched door (six feet) towards the river, and a small door and windows over it towards each end room. The end rooms were fifteen feet nine inches from east to west, with a small door and window over it on three sides. The plaster work and ornaments of the whole very rude. The drawing⁽³¹⁸⁾ will represent it. Enough remains on the front to make out every part but the cornice. That of one of the smaller inner rooms is entire. Although the whole palace is called the Marble⁽³¹⁹⁾ hall, very little of that material seems to have been in it. A band of stone seems to have run along the foundation of the principal parts and was rudely carved with flowers. Other bands seem also to have gone round at different heights, each of one stone. Many of the doors and windows seem also to have had lintels of stone, but not the sides. All this I conclude from the cavities formed in the brick work by taking out these stones, which it is said were removed to Murshedabad to build the Motijhil. The great house⁽³²⁰⁾ probably was the most splendid, and the entire ruin of the upper storey of the central part is

(317) I have failed to trace who this particular Mr Dickson was

(318) See plan, reproduced with sufficient accuracy, in *Martin's E. I.*, II, 71. Compare also Bishop Heber's *Narrative*, I, 255

(319) *Sang* does not mean 'marble', but 'stone'. Marble would be *sang-i-marmar*

(320) The "great house" is that lettered NN on the plan in *Martin's E. I.*

probably owing to its having more than usual marble in its composition. This great house, one hundred and eighteen feet long by thirty nine feet seven on the outside was above divided into three apartments, the central one totally fallen or removed. The under storey of each wing divided into two, that of the centre into six. The height of the upper storey perhaps thirty feet from the terrace with a wreathed cornice. All along the three sides of this square, stones with a hole in them surrounded the cornice for stretching out awnings. A covered gallery run[s] between the lower storey and the river. And between that again and the river seems to have been a terrace defended by a wall and semi circular towers, now undermined and fallen down. There are no traces of this terrace between the east end of the Dewan Khana and the Sunamusjid,⁽³²¹⁾ there having been there no gallery and no lower storey but between the terrace of the Dewan Khana and the river was a walk about twenty four feet wide, which extended to the Suna Musjid or oratory the door of which faced this walk, and was sixty feet beyond the range of buildings by which the terrace of the Dewan Khana was bounded on the west. The Suna Musjid seems to have been the private chapel or oratory of the prince, and is one of the most entire parts of the whole but is so hid and altered by additions made by Mr Cleveland⁽³²²⁾ that little notion can be formed of its effect when entire. In the first place the front which was faced with white marble as far as the cornice is destroyed by a room built before it. The room it is true is rather handsome and the front of the mosque forms one of its ends but then the marble minarets at the corner have been built into the wall of the room, and cornice removed. An open gallery has been built round the new room and a small bath reared up against the south side of the oratory. The oratory within is entire. It is eighteen feet long by twelve

(321) *Sona masjid* the golden mosque *sona* (H) means gold

(322) Augustus Cleveland was Assistant to the Collector at Rāmahāl in 1773; Assistant at Bhāgalpur 1776-80 and Collector of Bhāgalpur 1780-83. See Appendix 1.

wide, and about the same height. What kind of a ceiling it had, cannot be ascertained as the roof has been removed, and a terrace, after the Anglo-Indian style, substituted, with its abominable naked beams and burghars⁽³²³⁾. The sides of the oratory within are lined, to the spring of the arches four feet high, for the marble is everywhere cut in smooth slabs with very few mouldings like those on the wainscoting of an old room, and these rudely cut. Whenever any higher degree of ornament is attempted, the natives had recourse to plaster. The marble on the front reaches about twelve feet high, and on the different slabs have [*sc* has] been very neatly cut and inlaid with black marble, various pious sentences, and the names of holy persons, in a very handsome Arabic character. The outside of the building on the other three sides or at least on the cornice, has been gilded and painted. This had been whitewashed by Mr Cleveland, but part of the whitewashing has disappeared, and restored the bright colours to view.

Immediately west from the oratory, and contiguous to the river, is a small building where it is said the prince retired to pious studies, after he had prayed. It consisted of three chambers. The width within the walls, eleven feet ten inches. The two end ones were thirty-one feet six inches long, and had a plain coach-roofed ceiling, plastered very indifferently. Each had three doors and some small windows like port-holes. The middle room, twenty-five feet six inches long, had at each side three doors supported and divided by two double pilasters and two double columns of black marble. The columns including base, shaft and capital, are only six feet high and very rudely shaped, from whence an idea of their miserable effect may be formed. The ceiling is rather neat, consisting of an oval, arched cavity joining two semi circles and neatly divided into small compartments. A verandah

(323) This is a Hindī word, *bargā*, meaning a squared piece of timber, a beam or rafter. Yule and Burnell, in *Hobson Jobson*, s v 'burgher' simply give the meaning and derivation, without citing instances of the use of the term, which was probably confined to northern and eastern India, as it is not found in Dalgado's *Glossario*.

has been added to the whole south front of this building by Mr Cleveland, which totally destroys all means of ascertaining what its effect might have been. He has also enlarged most of the windows by cutting them down to the floor and putting venetians in them. In the palace I suppose there were few doors, or window shutters of any kind. Curtains or screens were probably used everywhere except where wooden doors in passages or outer gates were considered as necessary to exclude or confine those with evil intentions.

I presume that the principal entrance was from the east by the gate A into a square surrounded by buildings, now removed to make room for the seray,⁽³²⁴⁾ and occupied by guards. In its centre has been an octagon reservoir which received water by a canal seventy two feet long. Passing round this reservoir to the opposite gate B the visitor had on his right another gate shutting the passage along the canal, which leads along the middle of a high terrace laid with plaster. This canal seems to have passed north from this gate to another smaller octagon reservoir and probably through a court surrounded merely by walls. This second reservoir had on each side a large building of two storeys and containing in its upper floor three fine apartments. In the same line with these were two very long but narrow and lower ranges of buildings but also of two storeys. Their subdivisions I did not trace. Between these two ranges was the principal building⁽³²⁵⁾ already mentioned and it was connected to these ranges by a low wing on each side but also of two storeys. In front of the principal building was a terrace in the centre of which was a square reservoir from which a canal lead to the other two. In each of these there were probably *Jetd'eaux* [*sic*] ⁽³²⁶⁾

On passing the gate B the visitor came to another court merely surrounded by a wall except on the

(324) i.e. *serai*, inn

(325) The great house above.

(326) Read *jets d'eau*, jets of water

north, where there was a gate called Mozura gha ⁽³²⁷⁾ The gate passed through a building about thirty feet square, and was small It is immediately in front of the Dewan Khana At this place, the inner door of which is about one hundred and ninety-three feet from the terrace, all those admitted to an audience began their bowings and prostrations, which were repeated as they advanced towards the Dewan Khana On their right, in front of the large building C common to the two courts, is a small elevation of brick D, on which, some say, the principal officers of the court sat

East⁽³²⁸⁾ from the terrace of the Dewan Khana and extending one hundred and ten feet five inches farther south, was a long range of buildings so much ruined that little can be made of the structure, but it seems to have been lower than the range on the east side of this court It terminated in a large building of two storeys, and three chambers on the upper, thirty-five feet ten inches long The wall of this towards the court of Dewan Khana is perfectly entire, and does not contain a single aperture, except one door, by which the upper storey communicated with a gallery, leading to a small square building near the Mozura gha, and under which were some recesses as if for the accommodation of a guard I have no doubt that this square building was a guard room occupied by eunuchs, while the Mozura gha, and the recesses under the gallery were occupied by male guards, and that this gallery was the proper entrance into the women's apartments Of these, the building twenty-five feet long and another of the same dimensions west from it at the distance of about 70 hundred and twenty-three feet, seem to have been the chief places, while the oratory and adjacent building formed the boundary towards the river The court was probably completed by a set of low apartments surrounding a corridor as usual

(327) Martin printed "Mojragah" It is intended for *muṣṛā gāh*, 'obeisance' or 'audience place', an unusual expression nowadays

(328) This is slip for "West".

West from the Singi Delan at a little distance is a neat mosque of no great dimensions but ruinous said to have been built by Futeh Jung Khan ⁽³²⁹⁾ and called Akberabad after the Moslem name of the place. About half a mile from this, and just beyond the point of the river is the Mokbara or monument ⁽³³⁰⁾ of the same personage, who is said to have governed the place in the reign of Akber. It has been a considerable building, but is very ruinous. The eastern face of the outer wall has had many stones. South from his monument are the remains of his living abode which seems to have been large. One gate of very considerable dimensions remains, and another building of brick called the twelve doors ⁽³³¹⁾.

5th January — I passed in farther examination of Rajmahal. The oratory at Singgi Delan stands on a bank of the river projecting far to the north and the channel of the Ganges under it contains a good many large masses of stone, but I saw no entire rock. The stone is a dark grey whin excessively tough and of a conchoidal fracture. It contains many dark shining points seemingly of a shorlaceous nature.

I went to visit the Jumma Musjid, ⁽³³²⁾ distant about four miles from the Singi Delan. What is called the town extends about $2\frac{1}{2}$ miles to a nulla over which there was a bridge named Bandur pul. The town has always in this direction been very narrow as it was built on a rising ground from two hundred to five hundred yards wide between the old bank of the river, and first a jhil and then a fine low cultivated piece of ground. Remnants of the town still remain all this length consisting of scattered brick houses intermixed with thatched hovels, but by no means occupying the whole space. The only large

⁽³²⁹⁾ See *Martin's B. I.* II 63—69 but Fatah Jang Khan is described as a rich Muhammadan Zamindar in the *Gazetteer* (p. 276).

⁽³³⁰⁾ *Maqbara* properly means a burial place or sepulchre.

⁽³³¹⁾ This is the Bārahdari in the compound of Mr. Hennessey's bungalow (*Gazetteer* p. 276).

⁽³³²⁾ The *Jāmi masjid* erected by Mān Sngik (see *Gazetteer* 1910 p. 276). Presumably this is the Mosque at Rajmahal drawn and painted by William Hodges R. A. (see Appendix 2 note 7).

houses are that of the Nabob, which is but a sorry place and one belonging to a merchant, who lately died Jogot Seit's⁽³³³⁾ factory has been a handsome native house, but is now in ruins. There is another large house also in ruins, the lower part built of rudely squared stones. There are near the road four or five mosques of some size, and that have been handsome. They are all ruinous. Among the ruins is the Mokbara of Miran, the son of Jaffir Ali, who was killed by thunder⁽³³⁴⁾. It is in a very slovenly condition, but not so bad as the others, as some part is cultivated as a garden, and part of it occupied by flowers. A very large Dira⁽³³⁵⁾ has formed opposite and is increasing fast. It is well cultivated. From Bandur Pul to Jumma Musjid is a high tract of land overgrown with ruinous plantations, intermixed with a few huts. Jumma Musjid stands on the southernmost of two small stony hills near the old bank of the river. It has been the finest building⁽³³⁶⁾ that I have seen in Bengal, although not much ornamented, but the parts are tolerably large. It consists of a central nave arched above, and very high, in the back of which there were three niches, and a Mimbber⁽³³⁷⁾. It communicated on each side by two lofty arches with two aisles [aisles] consisting each of four domes. Each at the back had three niches, but the niche next each end

(333) The "Pathaigarh" of the *Gazetteer*, 1910, p. 276. Jagat Seth, the great banker of Muhsidābād, who was put to death, along with his brother, by order of Qāsim 'Alī Khān near Bārḥ in August 1763 (see *Siyar-ul-mutākhharin*).

(334) Miran, son of Mīr Ja'far 'Alī, then aged 21, was struck by lightning in his tent to the north of Bettia (in Champāran) during a heavy storm on the 2nd July 1760, when accompanying Colonel Caillaud in his pursuit of Khādīm Husain Khān. The cause of his death has frequently been disputed, but there can be no doubt whatever about it, as we have contemporary records still extant. See, for instance, *A Narrative of what happened in Bengal in the year MDCCCLX*, (published anonymously, but probably written by Caillaud himself). *Original Papers relative to the Disturbances in Bengal* (1759-64), 1765, I, 16, *Swinton Family Records and Portraits*, 1908, p. 31, in which portions of Archibald Swinton's diaries of the time are printed, *Asiatic Annual Register*, 1800, *Misc Tracts*, p. 17 (Col. Gilbert Ironside's *Narrative of the Campaign in Bengal in 1760*).

(335) i.e. *diārā*, alluvial deposit formed by a river.

(336) This comment is noteworthy, as it should be remembered, Buchanan had already completed his survey of Gaur and Panduā. For elevation and plan, see *Ma'in's E I*, II, 70.

(337) *Mimbbar*, an Arabic word meaning a 'pulpit'.

formed a small door. The total length on the inside fifty two yards width within seventeen yards. The roof very high at least forty feet to the centre of the domes and more to that of the arch. There were thus in front five great gates. Another arch, at each end, of the same size was walled up, and divided into four small obscure miserable hovels with a stair leading up to an equal number above. The stairs are so ruinous and bad that I did not ascend. But none of the building has fallen. It has a high square pediment in front from whence the wings slope gradually down a very little. No minarets. Some of the lower parts stone but very rude. A square area with three gates and surrounded by a brick wall is in front of the mosque and the space between it and the two lateral gates is elevated into a terrace twenty nine yards wide and equal to the total length of the mosque which is sixty nine yards.

In one of the cells I found lying a wretched idiot covered with filth and a few rags which did not prevent him shivering with cold. He said he was by birth a washerman, and that his father if he had one took no care of him. He procured food by begging in the neighbouring villages, and was in tolerable condition.

8th January — I set out with a view of tracing part of the route by which the Marattahs entered Bengal endeavouring to trace it by the description given by Captain Browne⁽³³⁸⁾ for the natives have no sort of remembrance or tradition concerning the event. I was informed after much enquiry that Chunakhali⁽³³⁹⁾ was at the foot of the hills distant five coses. That from thence to Behasi⁽³⁴⁰⁾ was three coses over some low hills and that part of the road I should be obliged to walk, but that an empty Palankeen could follow and carry me the remainder.

(338) Buchanan probably refers to Browne's *India Tracts* 1788, p. 12—13; but see also Appendix 8.

(339) Chunakhallighat; but Buchanan's Chunakhali must have been farther west, probably where Chankuli is shown on the old Rev. Sur map.

(340) Behasi.

That from Behasi to Madjuya,⁽³⁴¹⁾ and from thence to Mowarra,⁽³⁴²⁾ the residence of Gujer Raj, all was a good level road. I accordingly sent on bearers, and proceeded to Chunakhali, by the road to Nageswor bagh already described. Rather more than two miles from the Singhi Delan, I turned off the road and proceeded rather more than a mile to Hema Nudi⁽³⁴³⁾ a dry channel, which comes from the north and falls into the Great Jhil. It forms the boundary of the territory of Gujeraj towards the east, and from it to Chunakhali is rather more than two miles. The country so far is tolerably cultivated, but that of Gujeraj much worse than the property of the other zemindars. Chuna Khali is a guard belonging to the Ghatwals under Abdul Rusul,⁽³⁴⁴⁾ and the only cultivation beyond it consists of the lands belonging to his men. None of these cultivate themselves. They give their lands to Adhiyars,⁽³⁴⁵⁾ and are themselves sunk in sloth, a poor, spiritless, enervated race. Their bows are always bent, because I believe, in general they have not strength singly to perform the operation. The whole distance I had come being little more than $5\frac{1}{2}$ miles, or than one half of the distance I had been informed, unhinged my belief, and the agent of Gujeraj, who I know had been at Rajmahal, and had probably given the information, or at least had been present when it was given, now told me that I had been taken totally out of the way to Majhuya, which led over the hill Chaundi,⁽³⁴⁶⁾ and

(341) **Majhua** (near Borio).

(342) **Mandro Bazar.**

(343) Not named on S S

(344) The well known *sazawal*, 'Abdu'r-Rasul Khān, still remembered in these parts. Mr (now Sir) H. McPherson, in his *Final Report on the Survey and Settlement Operations in the Sonthal Parganas* (1898-1907) makes the following remarks

"After Mr Fombelle's time, the administration of the hills was left with very inadequate supervision in the hands of the native *sazawal* Abdul Rasul Khan, whose name still survives in the memories of the hill people as 'Con Sahib'. He was an officer of Captain Browne's partizan corps, who distinguished himself by his services and was selected as *sazawal* by Mr Cleveland. Later he abused the trust reposed in him and his misdeeds attracted the attention of the authorities."

(345) i.e. *adhiār*, "a man who spends half his time in one village, half in another, cultivating lands in both, is said *Adhiārkharna*" (Wilson, *Glossary*, p. 6)

(346) **Chamdi.**

was six coses distant That the road was hilly, but constantly frequented by loaded cattle, and that a gentleman had passed it some years ago on an elephant His people constantly went that way to the zemindar's house The Ghatwals denied all knowledge of the country Taking their chief and the agent of the Gujeraj with me I proceeded to Chaundi I returned for about a quarter of a mile by the same way I came and then went about half a mile north, along the skirts of the cultivation, when I came to the direct road between Rajmahal and Chaundi, and then went west almost four miles, through a level country of a very fine soil but covered with reeds and bushes In most places I could perceive the traces of former cultivation No stones but in one place I saw a few calcareous nodules (Gangot) I advanced about three quarters of a mile farther through coppice wood, and a country abundantly level for the plough, but in some places the soil is stony, although I saw no rocks The stones resemble those at the foot of Gudayi Tongi and among them I here also found small masses of a sort of chalcedony or white cornelian, often in parallel zones On the side of one piece was adhering a mass of crystallised matter Much Gangot intermixed

I then went over a tract of low hills, not at all steep, but much broken with ravines, for about two miles having on my right a hill named Horiya,⁽³⁴⁷⁾ which belongs to Mohisa Naib and on my left at some distance Borsī⁽³⁴⁷⁾ belonging to Sundra I was a good deal surprised that the road although so far frequented by carts, was so much beaten as that to Chunakhali more so when instead of proceeding through low hills between Chaundi and Borsī, I should be to follow the road up the former, which is Singhī Dalan to Horiya without any descent but is much higher being in

(333) Buchanan p. 12-13; but see

(333) Chunakhali is on the S.S.; but there is a hamlet Butai which may further west, probably Borsī.

(347) Borsī

fact one of the highest hills in the range. It now became evident that I could proceed no farther in the palanquin, and I ascended the hill on foot, not to the summit but to where the highest part of the road was said to be. The road is not worse, nor more steep than some of the ghats leading up to Karnata, and the whole ascent is not nearly so considerable. I do not think it more than three hundred feet perpendicular, but it is a very fatiguing and narrow passage and any sort of resistance must have been a bar to cavalry. The agent of the zemindar now informed me, that a place called Bichpura,⁽³⁴⁸⁾ a village belonging to his master, was six coses farther on, and bore west by south by the compass. It is situated on the west side of the Morung⁽³⁴⁹⁾ river, which arises with a vast many heads from the south side of the Sikliguly hills, and in the lower part of its course is called Guman merdan. From Bichpura to Mangjuya is one cose north. So far as I could judge there seemed to be no necessity for ascending Chaundi to go in that direction. The low hilly space nowhere rising above fifty feet perpendicular above the plain, seemed to wind everywhere between Chaundi and Borsi, distant south-east about a mile, and then between Chaundi and Goyal⁽³⁵⁰⁾ distant still farther south and the residence of Kundiya Mujhi. It also seemed to widen much farther towards Dagora⁽³⁵¹⁾ bearing south by west, and the residence of Lukma Naib. This, from where I saw it, with many other hills appeared to form a continued ridge, so far as I could see towards the west and east, but such appearances are entirely fallacious. The natives acknowledged that there was no high hill in the direction, but that no one attempted to penetrate that way, the woods were so thick, and the ground so broken by ravines and holes. This may be true, but roads might no doubt be easily made. The rock on Chaundi hill

(348) Bichpara.

(349) Morang N. called Marai N. a little further south, a tributary of the Guman N. or Gumani Mardan.

(350) Coalipahar.

(351) Evidently the Dhaugorapahar of the S.S.

resembles entirely the whin of Gudayi tongi, and on its surface are many blocks and nodules of a slag similar to what I observed on that hill. Finding it impracticable to reach the villages on the other side and to return before night, I was under the necessity of going back to my tents, where my attendants, who had come from Rajmahal and followed me all the way were quite knocked up and their feet swollen. Chaundi pahar belongs to Chandu Majhi, whose village was so near where we halted, that we heard the people speaking. We called to them, but they kept aloof, having been probably alarmed in order to keep them out of the way. As I returned I met Rupa Majhi of Gurra Pahar⁽³⁶²⁾ in Tuppa Majhuya, and took him with me to my tents. Taking him in there and making a sepoy, his countryman give him comfort he was at his ease. He says that some years ago his allowance was stopped under pretence that he had no people but that on his hill there are about fifty houses each occupied by one man his wife and children on an average four or five persons. A man separates from his parents whenever he marries, so that the families are not numerous. Every man who receives a pension from the Company gives a part to the Sezawul⁽³⁶³⁾ for fear of his illwill which might get their allowance struck off. In Tuppa Majhuya under Bika sirdar are nine Majhis who receive nothing. Three of them had allowances formerly. Even these he says, give the sezawul a trifle. He says that all the hill people give a present of grain to Gujeraj once a year. Each family gives some which is collected by the Majhis. This was in use before Mr Cleveland's settlement. He says that from the village of Chaundi to that of Bindur Kola⁽³⁶⁴⁾ is about one cose with a descent and ascent between, from Bandur Kola to Majhuya is a descent of half a cose. This being mentioned to the agent of the zemindar he says that the Majhi has no idea

(362) Carrapahar about 5 ml. NE. of Majhi.

(363) Sezawal (possibly a Turki word) a rent-collector land steward and also used in the more general sense of superintendent.

(364) Bandarkola Pahar

of distances The Majhi also says, that although Chaundi is the most usual road, there is another by Behasi,⁽³⁵⁵⁾ and he mentioned the same distances that I had heard at Rajmahal, but acknowledged that he had never gone that way I had then intentions of trying that way, but sending to look after a guide, a man was brought who seemed to be an honest-looking person, but he was a servant of the zemindar's, and probably was instructed to say what he did Panuk⁽³⁵⁶⁾ hill, according to him, is three coses from Chuna Khali all the way passable in a palankeen and level, but not cultivated The ascent of Panuk, short but steep Then there is a level of almost three coses,⁽³⁵⁷⁾ but the road bad, and another short descent brings you to Behasi, a small guard From thence to Majhuya three coses, a very narrow road but not steep The trees would prevent the passage of a palankeen Cross the Morang near Behasi From Majuya to Mowarra six or seven coses, a tolerable road He says that from Chaundi to Madjuya is three coses, a narrow road, but after descending Chaundi it is not steep, as Bindurkola may be left on the right After all I think it was by this Chaundi road that the Marattahs came, for I saw near it many heaps of stones, and on asking the Majhi what they meant, he said that long ago an army came that way, and had ordered the stones to be thrown off the road in heaps He could not tell what the army was. The total uncertainty of these reports determined me to proceed to my tents at Mosaha⁽³⁵⁸⁾ It appears evident to me, that both zemindar and sezawul are totally unwilling that I should visit the hills, or form any acquaintance either with Ghatwals or hill people, and have probably alarmed both, as they evidently shun me

(355) Beansi.

(356) Tulme (Panek) of S S

(357) From those stated by him it seems the guide had as little notion of distances as the Mānjhi

(358) The Mussahaur of John Marshall (1670), the Mussaw of Rennell, the Musaha of the old Revenue Survey maps but the modern Survey sheets omits this area altogether

7th January — I went to Mosaha. I first returned about three miles to near the monument of Mirza Muhammed, ⁽³⁵⁹⁾ and from thence struck north about a mile to the Nawab's house. The Jhil here is very narrow and at this season quite dry, but in the rainy season boats can pass to the jhil, which now contains water from another behind the Jumma Musjid, and that I believe communicates with others at the foot of the hills all the way to Mosaha and these are probably an old channel of the Ganges ⁽³⁶⁰⁾ I then proceeded to the Jumma Mosjid, and from thence passing behind the two hills, along a narrow space of high land to an old bridge fast hastening to destruction but the arches are still entire. These are of brick but some of the ornamental parts have been made of stone. The bridge is about a quarter of a mile from the Jumma Mosjid and rather more than a mile from Pirpahar ⁽³⁶¹⁾ where there is a handsome brick Dorga in tolerable repair but everything near it is slovenly. Pir pahar is a curious hill of no great size but communicates with another extending toward the mountains. Whether or not there was a passage for the Ganges behind that in the line of the jhils above-mentioned I cannot say. If there was not, Pir pahar and the adjacent hill must at one time have formed a very curious promontory as all the land between it and the hills of Jumma Mosjid are evidently a chor and that not of very long standing as a single tree has not yet grown on it. This hill consists of a white rock which crumbles on the slightest stroke of the hammer and consists of grains of fat quartz united by a white powdery matter. Even the quartz is so far decayed that it breaks by a slight blow. I cannot perceive in this rock the slightest trace of

⁽³⁵⁹⁾ The father of Ali Vardi Khan (Afshābat Jang)

⁽³⁶⁰⁾ Buchanan's view is borne out by the accounts of old travellers and the oldest maps. This channel is what John Marshall called the Little River up which he sailed from Rājmahāl in 1670. The old bridge described by Buchanan is, I am told still in existence.

⁽³⁶¹⁾ See Rennell's B.A., Pl. XV on which Jumma Musjid and Peer Pahar are both marked. The earliest map on which Pir Pahār is shown is that of John Thornton (1703) on which it appears as Phier Phear. The modern S.S. is useless for this part of Buchanan's tour,

stratification In some places there are a kind of horizontal streaks, but this is entirely external, the action of water or air, for they entirely disappear on scraping the surface The east end of the hill terminates in a bluff point, where the river has evidently washed away the mouldering rock for about six feet in height, and formed in it various cavities and holes Above this is a perpendicular mass from twenty to thirty feet (I speak by conjecture), in which no sort of fissure or stratification is observable I have no doubt that this is a granite in a state of decay, and if any conglutinating power should give firmness to its parts, we should then have a complete sandstone A most curious circumstance is, that the surface of the hill to the top is covered with fragments of stones totally different in nature The most common is the same slaggy stone that I found on the hills towards the south Some of the masses, as the specimen, are covered with a kind of enamel, but many are not I have no doubt of this being lava Along with this are many large masses consisting of small fragments of semi-diaphanous quartz united by a black earthy substance, and very hard In some places part of the same stone consists of this conglutination, and of an iron shot quartz or hornstone, both closely united without any intermediate fissure, and connected with the stratum above the Khorī at Khorī pahar showing the transition of the hornstone into Khorī From Pīr pahar to Mosaha, about five miles, is a chor near the Ganges, now well cultivated, but there are no trees, until you reach the vicinity of the hills Under the hills belonging to the mountaineers, and straight west from Mosaha, is a low hill, perhaps a mile in length Between it and the great hills is a large jhil, the principal haunt of the wild rhinoceros ⁽³⁶²⁾ The great hills here seem tolerably cultivated A servant, who went up, saw much orrohor ⁽³⁶³⁾ Opposite to Mosaha is a cultivated chor, separated by a narrow nulla from the

⁽³⁶²⁾ See Appendix 7

⁽³⁶³⁾ *Arhar*, vulgo *rahar*, the 'Pigeon pea' (*Cajanus indicus*)

main ⁽³⁶⁴⁾ The hills are about three cose from Mosaha of which one may be cultivated

8th January—I went about $8\frac{1}{2}$ miles to Sikirigari ⁽³⁶⁵⁾ along a plain from two to six miles wide Towards Sikirigari the hills are but poorly occupied some of them seem totally deserted and the others are chiefly cultivated towards the lower part Beyond Mosaha all near the road is almost quite waste Between three and four miles on there are indeed some villages, partly inhabited by invalids Maharajpur ⁽³⁶⁶⁾ is the most considerable but there is very little cultivation near them, some have not even the slightest vestige of even a garden The people seem to live entirely by their cattle, of which they have great numbers, and I saw many carts I presume they deal in grass and wood For about a quarter of a mile I kept near the nullah which then goes to the right to join the great Ganges For rather more than a quarter of a mile more, I was on the bank of an old channel From thence, until passing the village near Maharajpur was about three miles Here I came to the bank of the great river near which I continued most of the way At about $4\frac{3}{4}$ miles from Mosaha I came to the narrowest part of the plain where perhaps to the hills from the river is about two miles ⁽³⁶⁷⁾ The land here high and woody Near Sikirigari is some cultivation and both there and wherever else cultivation has been attempted the richness of the crops evinces the goodness of the land

At Sikirigari I found that the zemindar had run off, and the shopkeepers of whom there were ten or twelve have shut their houses They alleged that they had been plundered and beaten by the servants

⁽³⁶⁴⁾ i.e. the mainland.

⁽³⁶⁵⁾ It is important to note how Buchanan spells this name—Sikirigari and Sikirigari—which points to an original Sikharigari. See Appendix 4

⁽³⁶⁶⁾ Maharajpur, where there is a station on the Loop Line.

⁽³⁶⁷⁾ The course of the river just at this point, near Saranghori and Maheshpur has not changed much in the last 250 years.

of Mr Pattle,⁽³⁶⁸⁾ and by the people of the 2nd R N I. The zemindar had fled on Mr Pattle's approach, and nothing in all probability could be procured. All complain loudly of travellers, and they threaten to desert the place, yet it is evident that they are in the habit of receiving constant presents, as there was no end to the number of people who came to offer trifles, and under that pretext to beg. The Jamadar of the Thana had brought a mudi⁽³⁶⁹⁾ with a few sers of provisions, for which he asked about three times the usual price, so that I was under the necessity of desiring the Jamadar to fix a price, who allowed them about 50 per cent advance on the Rajmahal prices, and these were intolerably high. The people most loud in their complaints were those of the Serayı. They said that since Colonel Hutchison's⁽³⁷⁰⁾ death no one protected them. Every Burkondaj,⁽³⁷¹⁾ piadah and petty officer of police or belonging to a zemindar, came and did as they pleased. That everyone drove in his horse into their best brick apartments, and that the zemindar instead of furnishing either coolies or provisions, compelled them to serve, and to run after supplies, yet beside the six chambers of brick, which they have from the company, they have built several of straw.

From the beginning of the hill on the east side, that is where Colonel Hutchison's bungalow stands, to some way on the higher part of the hill, near the river side, the stones and rocks are whin, like that

(368) James Pattle was 3rd Judge of the Provincial Court of Appeal at Muhsidābād from January 1810 to December 1812. This is probably the gentlemen referred to.

(369) i.e. *modi*, a grocer.

(370) Lt-Colonel John Hutchinson, who was "Regulating Officer in charge of the Jaghirdar Invalid Institution", and who died at Bhāgalpur on 18 May 1801. See Appendix 3.

The bungalow referred to is probably that depicted on Thomas Daniell's delightful view of "Sicra Gully on the Ganges" in his *Views in Hindoostan*, generally called *Daniell's Oriental Scenery*, 4th Series, Plate IX, which he describes in his (rare) letterpress as "belonging to the British resident of the Bhāgalpur district."

(371) *Barqandāz*, from *barq*, 'lightning', 'thunderbolt' and *andāz*, 'throwing' or 'hurling', originally meant a matchlockman and then a guard (formerly armed with a matchlock gun). *Piyāda*, literally a 'footman', *anglice* 'peon'.

at Rajmahal but darker. It has no appearance of stratification. Some parts are rotten, and converted into a kind of bluish crumbling nodules, as if penetrated with manganese or iron. Immediately beyond that and adjacent are horizontal strata extending along the bank of the river so far as the hill is high. In the most perfect opening made by the precipice I observed as follows. From the waters edge for about twelve feet nearly the height of the floods, a rotten sandstone in various layers. Above that a layer about a foot thick of an excessively hard hornstone containing vegetable impressions and divided into rhomboidal masses six to twelve inches diameter by fissures. Above this a kind of rotten clay apparently the same stone in a state of decay $1\frac{1}{2}$ foot thick. Above that rotten sandstone two feet thick above that red earth twenty feet. This is towards the west end farther east between the hard hornstone which runs the whole way very regularly a little way below high water mark, and the indurated clay there is another stratum of rotten sandstone and above the indurated clay, which also goes regularly the whole way there is a great thickness of the rotten sandstone which in the highest part reaches to the top of the hill perhaps forty feet.

Farther towards the west beyond the hill and horizontal layers of sandstone &c there is a steep bank of reddish earth, which contains calcareous nodules of a most irregular shape. These are partly dispersed through the soil which rises into gentle swells but in this they are not very numerous. About the level of high water mark there is a horizontal bed of clay containing great quantities of the nodules closely compacted and the workmen have often dug into this when the river has been high, but in general they are deterred from a fear of the bank giving way, which has sometimes proved fatal. In the dry season abundance of the Kongkar⁽³⁷²⁾ is found by digging in the mud and sand left by the retiring of the

(372) *Kalkar* see note (139) above.

river, which seems to wash out from the bank, as much as has been taken away in any year. Perhaps indeed the whole side of the river to an unknown depth generates these nodules, as in digging the compact bed no one has penetrated to its bottom. Whenever the sandstone begins, no more nodules are to be found. It is said that these Konkgar banks are to be found in many places between this and Paingtī⁽³⁷³⁾. It is burned into lime both here and at the next stage. The kilns are about ten feet deep, eight feet in diameter at the base, and twelve feet at the edge, built of baked clay with four perforations from the bottom to the edge, to give air. They are heaped full with timber and Kongker, and then burnt out. Each burning gives five hundred to eight hundred mans. The Kongkar is dug and brought to the kiln by men, women, and children. It is sent to Calcutta, Murshedabad, Purneah, &c, constantly. The Pir's tomb here on the top of the hill is very ruinous. It has several inscriptions in the Toghara⁽³⁷⁴⁾ character. The Kadim⁽³⁷⁵⁾ says that he has only fifteen bigas, and that he is the eighth in descent, who has enjoyed the office. The pir was of the church militant. His head was cut off here, in battle with the infidels, but his body clung to the horse, until he reached the hill near Jumma Musjid. The Kadim is a very austere-looking man, but not void of civility nor understanding.

9th January — I went to the hills, which are distant about two miles from the river. The whole way is swelling ground, nowhere too steep for the plough, and of an excellent soil, but except in the

(373) **Pirpainti.**

(374) *Tughra*, a very ornamental style of writing. Steingass writes in his Persian dictionary "The imperial signature, the royal titles prefixed to letters which are generally written in a fine ornamented hand, a sort of writing."

(375) i.e. the *khādim*, or caretaker. The "Jumma Musjid" referred to is, of course, Mān Singh's mosque, about 4 mi. west of Rājmahāl Ives, in his *Voyage* (p. 160), when describing Coote's pursuit of Monsieur Law, refers to the tomb as that of Seid Ahmad Mahdūm (? Sayid Ahmad Makhdūm), and adds that it was built by Shareshe Khan (? Shayista Khān, uncle of Aurangzeb) otherwise nothing appears to be known, of this saint.

immediate vicinity of the village totally neglected and overgrown with low coppice, kept down by constant cutting for firewood. No stones in the soil until you enter between the hills. The northern face of these has been entirely deserted. It has formerly been cultivated, traces of the fields being evident. The inhabitants seem to have retired into the deep recesses of the hills or to their southern side. The nearest village of them, that I saw, was above a mile within the northern face in a deep recess. I sent Kamol⁽³⁷⁶⁾ to the top of the hills. The people were much alarmed at his appearance but one of their countrymen with him reconciled them. He returned by the Moti Jorna, ⁽³⁷⁷⁾ a spring considered sacred. The water forms a lofty cascade but at this season the quantity is so inconsiderable that I did not think it worth a visit. I was afterwards informed by Mr Glas,⁽³⁷⁸⁾ that in the rock at the cascade there is a stratum of charcoal.

10th January. The road to the hills, about 10 miles to Ganga Prosad⁽³⁷⁹⁾ is a wide and level country, extending from the base of the hills, and about one and a half miles from the river. The sandstone, which has been a fortification on the river to the hills near its eastern side, the west consisting of two ramparts of earth with a valley between, but it is very much obliterated. On this high tract there is a plain for about two miles not very low, and from three to four miles between the river and the hills ⁽³⁸⁰⁾ From thence is another high tract of about one and a quarter

(376) Apparently one of Buchanan's Indian Assistants? Kamala.

(377) Moti Jorna, the pearl cascade. Visited in 1781 by William Hodges the artist, who describes the double falls as measuring 105 ft. and writes that in the cave at the bottom the base appears to be a mixture of rock and charcoal; that is the interstices of the rock appear filled with charcoal and many fragments broken off are composed equally of the two materials. Hodges probably drew the falls, but no picture of them appears in his *Select Views in India* (1786). See his *Travels in India* p. 23-24.

(378) The then Civil Surgeon of Bhagalpur; see note (33) above.

(379) Ganga Parashad constantly mentioned as a stage on the old military road up country.

(380) The Ganges must have flowed in a more northerly course in Buchanan's day. See Rennell's *B.A.* Plate XV and also the modern Survey sheet.

mile extending also from the river to the hills. Here is an appearance of an old fort⁽³⁸¹⁾ with a wide ditch apparently much more recent than the other. At the east side of this high land near the river is a village without cultivation, and inhabited by petty traders, who deal with the hill people. Then there is a plain of about half a mile in width, and then high land for the same extent. From thence to Gonga Prosad is a plain of about 2½ miles.

At Gonga Prosad, being visited by many of the hill people, who were induced to come to a feast, I took the following accounts of their customs. They call themselves simply Moler,⁽³⁸²⁾ and call the low country people Goler. I cannot discover any meaning in their name, it is not mountaineers, Pahar being the name of a hill in their language. They have nothing like caste, and would have no objection to eat or intermarry with any other tribe. The Kumar and Mar they consider as Moler, but they have no remembrance of these having had the same customs with themselves. The Khetauris they do not consider as Moler, nor the Bhuyias, not even those who eat beef, but there are none such here. On many occasions usually held sacred by other people, they use no priest, every man praying and offering sacrifice for himself. When sick, they give herbs, and apply to low country Chassa⁽³⁸³⁾ doctors, but not to Ojas. Some of them have learned from these last to repeat muntros⁽³⁸⁴⁾ for the bites of snakes, but for no other cause. They are not troubled with Devils. They seem to have two

(381) This is not the modern Sakrigharh, which adjoins Gangā Prasād. It may be the site of the original *garhi* from which Sikharī garhi took its name. The orographical features of this area not being shown on the latest Survey sheet (1 in = 1 mi) it is not possible to locate the "high land" referred to by Buchanan.

(382) *Mala*, or *malai*, is a Dravidian word meaning hill. The name Maler is probably derived from this. I can not suggest what "Goler" means, unless it be connected with Kol.

(383) *Chāsā* means a cultivator, by Chassa doctors Buchanan means Chāsā Baidyas, a title sometimes applied to the Vaidyas or Baidyas of Bengal by outsiders. Ojhā, a corruption of *Upādhyāya*, means here a 'sorcerer'.

(384) *mantras*, 'spells', 'incantations'.

deities Rakisi and Chaldaï, both are called Gosaïn (385) Some say that the former is male and the latter female, but more seem to think more rationally that both are stones as in fact they appear to be Certain stones under large trees are called Rakisi, and others are called Chaldaï and have been objects of worship from time immemorial Each village has one god of each kind and no more The two great festivals Erebas⁽³⁸⁶⁾ are in Aghron and Bhadur,⁽³⁸⁷⁾ when sacrifices are made to both deities on account of the harvest Oxen buffaloes, goats, swine, fowls and pigeons are offered indiscriminately to both The festival lasts one day All the men of the village go together and every man offers according to his abilities animals grain liquor &c The women do not attend All the offerings and sacrifices are made by a person called Erebu⁽³⁸⁸⁾ whose office is hereditary, by primogeniture in the male line There is one Erebu and no more in each village If the Erebu dies without children his office goes to a collateral branch They have not known any family to become extinct The collateral branches and even the Erebus, work like other people and the Erebu seems to have no sort of emolument The whole offerings are consumed on the spot The Erebu is respected, but not so much as the Majhi All the Erebus are of the same rank, and intermarry with the vulgar In Maag⁽³⁸⁷⁾ each Majhi sacrifices (Ereba) a buffalo (Managa) to the earth, which is attended by all the men of the village, who all partake on the spot The Erebu attends but the Majhi offers the sacrifice No other great sacrifices Before they went to war they were wont to

(385) The Raxie and Chal of Lieut. Shaw and the Rakai Gosain and Chal Naddu of Bainbridge (*Mem. JASSB* Vol. II no. 4 p. 80 and p. 75 respectively) Gosaïn a term now applied to a religious mendicant is derived from *gosaïn* one who is master (*svamin*) of his senses (*go*) Among the hill people the term is applied to a godling or deity

(386) The Rev Ernest Droese in his *Malto Vocabulary* (*Introduction to the Malto Language* Agra 1886) gives *erwe* to sacrifice, propitiate worship. From this are derived the words mentioned by Buchanan.

(387) *Ajrahdya* and *Baddra* (vulgo *Aghra* and *Baddra*) corresponding with November—December and August—September Maag is *Mogha* January—February

(388) *Erwu* or *Erebu* the performer of the sacrifice, i.e. the priest.

offer sacrifices of goats to Rakısı by the Erebu. They bury the dead. All the men of the village attend the funeral of the poor. Those of ten or twelve villages assemble to the funerals of the great. Five days after, the family gives an entertainment. The people return home in the interval and reassemble for the feast. The corpse buried on the day the person died. No sacrifice nor religious ceremony. The women do not attend. They seem to have no belief in a future state of existence, though some say that all good or bad go to heaven, where the sun lives, for they look upon the sun (Ber)⁽³⁸⁹⁾ as the chief god, but never pray nor make offerings to him. The moon (Bilho)⁽³⁹⁰⁾ is also called Gosaign, but not the stars. If people are wicked, they are punished in this life by Rakısı and Chaldayı with disease, death, want, and dangers. Their form of oath is to take salt and water from the administrator and drink it, or to touch his arm (sword) saying—May I die if I speak false. They never swear by the Gods. Children of both sexes are usually married between ten and fifteen years of age. The parents consult the boy's inclination, and then consult the parents of the girl, who is not at all consulted in the matter. Her parents get money or effects, perhaps ten or twelve rupees, but their expense on the occasion amounts to more in clothes and an entertainment. The relations and friends of both sexes of both parties assemble. The boy and his party go for the girl, and after being entertained, both parties conduct her home, and are entertained. No religious ceremony. The boy presents the girl with some ornaments. The men cannot divorce a woman for any fault, but a woman, whose husband beats and starves her, may leave him, and marry another, and widows may marry again without disgrace. Rich men marry three or four wives, who are all of the same rank, and the children all equal. No

(389) The *Bedo* of Lt Shaw, the *Ber* or *Beru Gosain* of Bainbridge (*loc cit*) Roberts (*Asiatic Researches*, V, 129) gives *beer* as meaning 'sunshine', and *beelah* as 'moonshine' (see next note)

(390) The *Bilp Gosain* of Bainbridge (*loc cit*, p 65)

prostitutes When a man dies the women are left entirely dependent on the sons, who share equally in his effects but his honours and consequent power go to the eldest alone (391)

They are all cultivators, and have no artists, but build their own houses Their arms, and every utensil cloth and ornament they purchase from below Some of them as in this vicinity, have neither buffaloes nor oxen, but towards the south they have many cattle They rear a few goats, many swine, fowls, and pigeons

Here the people acknowledge that formerly they were subject to the zemindar of Tiliyagori, (392) and made him presents of grain and honey, but since the estate has been mostly sold, they decline any interference of the new men and give no presents The lotdars (393) have taken some of their lands on the plain, which they had lent to low country cultivators, for here they will not cultivate the plain The sepoys come chiefly from Tiliyagori Monihari, Barkope, Parsunda Horina Jomna (394) and amount to perhaps one-fourth or one-fifth of the men able to serve Very few from other quarters Every territory under a Mandiya is called Kepo and its chief Mandiya Moko (395) A number of Kepos formed a district under a Bodo (396) Mandiya, but it would not appear that they have any name for the territory under such a chief they use the Hindostani words Pergunnah tupa (397) and zila indiscriminately The under Mandiyas paid no regular rent but made presents to their chief, and never went to fight without his orders or consent, for everything was done by a general council no person had any authority to punish even murder That was left to the kindred and the efforts of the Mandiyas

(391) This account of the customs of the hill people may be compared with that of Mr R. B. Bainbridge in *JASSB Memoirs* 1907 already quoted

(392) Tellyagarhi

(393) Lotdar holder of a lot, or area of land.

(394) Tellyagarhi Monihari Barkop, Parsunda and Harina Jamuni.

(395) I do not find these words in *Droese's Vocabulary*

(396) Bodo = *batz*, big

(397) *groat*

(397) i.e. *tappa* a territorial division generally smaller than a *pargana*.

were directed to persuade the people to forgiveness. No one went to war by compulsion. The common people (Loker) commonly called Prijus,⁽³⁹⁸⁾ make presents to the Mandiya, but pay no regular rent. All the land in fact belongs to the Mandiya, or rather community. The chief gives to each family a share in proportion to its strength, but if the family is not able to cultivate the whole, he gives a part to the families that have too little. Families that are too numerous, when there is no spare land, must emigrate to another village. They cultivate the field three years, and then allow it to remain fallow for eight or ten years. On the first year they sow Mukai, Janera, Bora, and Rahar.⁽³⁹⁹⁾ On the second, the same, on the third year they sow cotton alone, and then leave the field to a fallow. The men cut the timber, both men and women burn, and sow, or plant with a small hoe, both work at harvest. The Pochuyi⁽⁴⁰⁰⁾ is made of Janera and maize. First they boil it, and cool it on a mat. Then they mix bakur,⁽⁴⁰¹⁾ and put it in a large earthen pot for eight or nine days. Then they add warm water. It is ready in a few hours, and will keep two or three days. It is called Pochuyi Todī. Some can distil it, and make Putka Todī⁽⁴⁰²⁾.

They sell to the merchants firewood, posts, ploughs, mortars, planks, Jonera, Makayi, cotton, Bora, Orohor, charcoal, Sabe,⁽⁴⁰³⁾ honey, wax. They bring these all down to the markets on their heads, receiving in general advances. They buy rice, cloth, tobacco, salt, beads, brass ornaments, cattle, milk, ghi, oil,

(398) Loker is from the Sans. *loka*, 'people'. Priju (thus distinctly, written by Buchanan) is probably meant for *prajā*, lit. 'offspring', but ordinarily applied to 'subjects', *raiyats*.

Mr. H. L. Allanson informs me that until the settlement of 1912-16 the Pahāriās paid no rent to Government. Now they pay a very small rent in return for their rights in their holdings being recorded.

(399) i.e. maize or Indian corn, Jowār millet, beans and Pigeon pea, respectively.

(400) *Pachwāi*, beer or malted liquor, made from grain.

(401) *Bakhār*, a ferment (see note no. 170 above).

(402) *Pachwāi tāri*, and, possibly, *phūtlā tāri*, from *phūtnā*, to 'boil'.

(403) The reference to *sābe* or *sābai* grass (*Ischæmum angustifolium*) is interesting, as the cultivation of this perennial grass is now practically the sole source of livelihood to the northern Pahāriās.

fish, dry and fresh, pepper and other seasoning, and iron implements

The hills are warmer than the lower country, and contain springs. A few are subject to the Geg⁽⁴⁰⁴⁾

Gonga Presaud is a miserable village, with scarcely any cultivation but it has several shops and some Bhetiyars⁽⁴⁰⁵⁾. The people loud in their complaints against European travellers, apparently with a view to enhance the price of everything. The zemindar's agent had run away and every article was scarce.

11th January —I went to Piyalapur⁽⁴⁰⁶⁾ the road to Paingti by the side of the river being impracticable for loaded cattle. The distance is said to be seven coses but it seems to me to be rather less. The high land west from Gongaprosad between the little hill at the river's side and the great hills, may be a mile in that direction, and $1\frac{1}{2}$ mile by the road a fine soil without a single stone. There is then a fine low plain, about two miles long and one wide to Tiliyagori. Here the hills descend to the river's side for about a mile and their roots⁽⁴⁰⁷⁾ have been occupied by a fort the outer gates of which partly built of stone, are

(404) I do not find this word in Droese's Vocabulary and I have no doubt that it is intended for the Hindi word *ghāṅṅā* or *ghāṅṅā*, goitre.

(405) *Bhāṭiyār* —is a man, or woman who cooks food for travellers at an inn an inn keeper from *bhāṭī* a furnace fire-place.

(406) *Paiyapur*. Had Buchanan been able to follow the direct road from Shāhābād to Pīrpāintī instead of going round by Pīlāpur he would have saved a day.

(407) Buchanan's description of the site is significant; and the situation of this fort, in my opinion explains the name, which was probably originally *Taliyāgarhi* or *Taliyāgarhi*, meaning the little fortress at the base of the hills. (See Appendix 4). For earlier descriptions of the site by Ives and Hāji Mustāfa (Raymond) see *Gazetteer* (1910) pp. 284—85. John Marshall when going up to Patna by road in May 1671 records the following entry in his diary:

To Sasujas Castle or house under the side of a high hill. I went into it, in which are 3 little Courts and many little rooms, and a good *Delaun* [*dāḷān*] in the middle, and at each end a round Turret with 3 windows in each for Cannon. Above is room enough for 70 or 80 Cannon and twice so many small Gunns or Musquets. This Castle stands upon the side of the Hills very pleasantly.

It is possible that it was the remains of this building that Buchanan conjectured to mark the commandant's house. About $\frac{1}{2}$ mile further west Marshall passed under a gate probably the gate through the western line of fortification.

about that distance from each other. Within have been several buildings of brick. One of them probably the Commandant's house, and an adjacent chapel are pretty considerable. An iron gun of extreme rudeness lies on the ground at the western gate. There is no rock apparent, but the soil of the hill consists of masses of whin embedded in a little earth. It entirely resembles that at Rajmahal. I observed no other stone mixed with it. West from Tilivagori a very large Dira has formed adjacent to the south bank. There is a narrow low plain between that and the hills for about two miles, after which the whole way to Piyalapur is a fine high swelling land covered with woods, that are evidently deserted fields and plantations. About $3\frac{1}{2}$ miles from Tilivagori is a place called Shahabad,⁽⁴⁰⁸⁾ once considerable, but now there is only one hut for the post. There is a pretty large ruinous mosque. About $2\frac{1}{2}$ miles beyond this is the bridge⁽⁴⁰⁹⁾ of Pita Waleh, built of brick over a small creek, and in tolerable repair. It is said to have been built by a woman, who retailed flour, in this country one of the most miserable of professions. The hills in sight are rather better cultivated, than those I saw between Mosaha and Gongaprosad, but not near so well as those towards the south. The road to Shahabad bad. From thence to Piyalapur very good.

Piyalapur is a wretched place, with scarcely two acres of cultivation, belonging to the inhabitants. A well and bungalow built by Colonel Hutchinson, I presume at the expense of the Government, denote the lavish of public money, that has been wasted in vain on this district. The people, as usual, clamorous against European travellers. About fifty hill people from Sikrigori, who had there shunned all intercourse,

(408) **Shahabad**, a halting stage on the old road, often named in the itineraries, probably named after "Shāh" Shujā.

(409) This bridge is marked by Rennell (*B A*, Pl. XV) on the Kunderpol Nulla, the **Moni N** of the SS. John Marshall writes that "a new bridge was building" here in May 1671. If the builder were a woman who retailed flour, it looks as if the name should have read Piṣnewālī!

came after me here, having heard that I had entertained those near Gongaprosad. As they came too late to give any information and had declined intercourse when it was in their power to be of use I sent them away empty.

12th January — I went about seven miles to Paingti ⁽⁴¹⁰⁾ through a fine swelling country, rising into small hills near the above-mentioned place. From thence to Kahalgang ⁽⁴¹¹⁾ and Shahabad is certainly by nature the finest country I have seen in India, wonderfully rich and beautiful, but almost totally neglected. About two-thirds of a mile from Piyalapur I passed an indigo work belonging to Mr Glas, and soon after left the great road. About $2\frac{1}{2}$ miles from Paingti I joined the road by which I had gone from that place to Bader ⁽⁴¹²⁾. The whole road has been lately repaired, and is pretty tolerable.

13th January — A Naib of Mohi ⁽⁴¹³⁾ with all the people of his village young and old, men and women, came from the neighbouring hill to make me a visit. The Naib had been in the service of Mr Hastings and Mr Cleveland but still had the appearance of a young man. The women not so clean as those towards the south, and more hard featured. The people are subject to the leprosy of both kinds to the Geg, and Fisplen ⁽⁴¹⁴⁾ just as the natives of the plains. I gave the whole party a dinner, but they were so impatient for drink that I could scarcely restrain them from the liquor until the cook had performed his office and when it was ready, they gobbled their food as quick as possible in order to get at the flask. They then began to drink dance and sing accompanied by a drum. They all stood in a crowd, even the women

⁽⁴¹⁰⁾ Pirpaingtī

⁽⁴¹¹⁾ The Colgong of our maps. The real name is Kahalgāhv orce famous, according to a current proverb for its *(kaga)* (robbers).

⁽⁴¹²⁾ Bhader

⁽⁴¹³⁾ No village of this name is marked on the S.S.

⁽⁴¹⁴⁾ An explanation of Geg has been suggested above (note 404); but Fisplen written perfectly clearly by Buchanan, has been a corn plate puzzle and local correspondents have failed to identify the word. It is not given by Drossé nor in Buchanan's *Index of Native Words*. Can it be intended for *ḥpdon* elephantiasis? I think so.

who carried infants, and made a very awkward hobbling dance without any form. The Naib brandished a battle-axe, but as he became very drunk, I took it from him. He was very sensible of the propriety of this, and made no efforts to retain it. All the women, men, and children sang a very monotonous rude air. The sirdar constantly went round with a pot of liquor, giving each person in his turn a drink, he holding the pot to their heads and not trusting it in their hands. The men before they drank salaamed or bowed to all the principal persons, both spectators and dancers, and the women generally went down on their knees, or at least touched the ground with their hands. When the Naib had gone round the party, a man took the pot and gave the chief a drink. The drinkers probably never are trusted to hold the pot, lest they should take the whole at once. In about an hour most of the men were very far gone, and one of the women, who had an infant, could scarcely stand. I therefore desired them to go home, which they did with great good humour.

The mineral productions of the vicinity of Paingtī are very curious. At the upper end of the village two hilly promontories reach the bank of the Ganges, towards which they are abrupt, towards the interior they communicate with the swelling ground that extends to Kahalgang and Tiliyagari. On the one nearest Paingtī is the monument of Pīr Kamāl shā, a plain building without a roof, but in good repair. The Kadīm has an endowment of five hundred bigas. On the ascent to the Dorga,⁽⁴¹⁵⁾ you pass two brick buildings of some size, and that have been neat. On the right is a mosque, not yet fallen, although in very bad repair, large additions were made⁽⁴¹⁶⁾ in front to enable it to accommodate two companies of sepoy during the commotions of the hill people. The Moslems have had the sense not to consider their place of worship defiled by the infidels, and still continue

(415) The *dargāh*, or shrine of Pīr Kamāl Shāh, a saint of local fame

(416) By Captain Brooke, in military command of the hill tracts in 1772-74 (see Appendix 1), as we learn from the Report

to frequent it to offer their prayers to God On the left is a Madrissa,⁽⁴¹⁷⁾ or public school, where a Maulavi formerly instructed youth in Arabic science The roof has fallen the Maulavi has gone and the only inhabitant is a most wretched hermit, to the last degree miserable, who inhabits a cave ⁽⁴¹⁸⁾ that communicates with the Madrissa This cave is said to have extended a great way, and served the troops as a magazine When they went away, the passage into the farther part was shut up with stones and bricks leaving only a small chamber probably in order to prevent it from being a harbour for thieves It is cut without the least regard to symmetry or neatness, in very soft materials, but is perfectly dry No tradition remains concerning the use of this cave The Madrissa has consisted of three chambers with a large open gallery in front On the abrupt face of this first promontory towards the river but at a considerable height above high water mark is another cave facing the river It is nearly in the form of a quarter sphere with a low recess leading from behind but to no great distance It is pretty large and dry but totally divested of symmetry or neatness The materials very soft This is said to have been the habitation of Deo that is a Hindu God but Deo was killed and cast forth by Pir Kamal shah who, as usual with the Pirs, was of the order of the church militant In the abrupt face of the second promontory is another similar cave, which is said to have been the residence of a Hindu hermit, from whence this promontory is called⁽⁴¹⁹⁾—as the first is called Pir Paingtī from the Moslem saint Between the two is a small level bay Having given this explanation of the Topography I proceed to describe the minerals, which may be reduced to three

(417) *Madrassa* (from a root meaning to read) a school college; collegiate mosque.

(418) Bishop Heber (*Narrative* I 266 f) devoted some time to the exploration of these caves. Besides him, Buchanan is the only person who gives any detailed description of the site. John Marshall who calls the place *Pante* under date 19th September 1670 noted the *Muskeet* (musjid) on the hill and adds that there was at the side next the River a pleasant Bungalow (i.e., bungalow)

(419) Left blank in the MS

heads The face of the promontory at Pir Paingti shows the whole From low water mark to about six or eight feet above the height of the floods, is a very soft kind of sandstone, or rather indurated earth, the particles of sand being very small, and mixed with much argillaceous matter It would seem to be in thin horizontal strata, but is so much intersected by vertical fissures, that this is not very certainly ascertainable The air does not seem to act strongly on it, as the angles of the masses are sharp, but it is too soft and too much broken by fissures to be a useful material for building, nor does its appearance offer any encouragement for supposing that by digging deep its quality might improve It does not appear to contain any extraneous matter

Above this, and of various thicknesses, is a mass of hornblend, as it is called, which is far gone in a state of decay, and may be considered as a dead rock There is not in it the smallest appearance of stratification The greater part has become so soft that it crumbles under a slight stroke of the hammer, yet in the cave of the Deo, certainly made very long ago, the angles are perfectly sharp, and the marks of the instruments, by which it has been cut, are quite distinct and well defined Immersed in this soft substance are many rounded nodules, from the size of an apple to three or four feet in diameter The smallest ones are also in a state of decay, but the larger are very fine hornblend with many crystallized parts, and are used for making the stones with which the natives grind the materials for curry These nodules are called Teliya⁽⁴²⁰⁾ stone by some, but others allege that Sang Khara⁽⁴²¹⁾ is the proper name I have said that in the promontory of Pir Paingti this stone is incumbent upon the soft sandstone In the promontory of⁽⁴²²⁾—Tek it reaches the low water

(420) i e, pertaining to, or like, oil (*tel*), and so 'oily', and also of the colour of oil, 'bay', 'dark', etc

(421) *Sang i-khārā* (Pers), 'hard stone' (like flint, etc)

(422) A blank was left in the MS for insertion of the name, which was never added *Tek* means (1) a 'prop' or 'pillar', and (2), as here, a 'heap', a 'hillock'.

mark and rises a few feet above the height of the floods. There is no reason to believe that in any part it might be found entirely undecayed, and these two places seem to be where it is most entire for in the plain between the promontories, and in many places in the interior are found many of the nodules of Tiliya imbedded merely in earth which seem to be the softer parts of the rock reduced to a substance of earthy nature. These nodules are also collected by the workmen. On the whole I conclude that the mass of these hilly parts originally consisted of this hornblend, which so far as I have seen, approaches very near to whin or basalt and is never stratified. The most curious circumstance is that unstratified matter covers stratified indurated earth which I can only account for by supposing it to be a lava, as I have no doubt all whin is

Above the hornblend on both promontories is a mass of calcareous tufa of various thicknesses. Its upper surface often projecting above the soil is generally mamillated⁽⁴²³⁾ like many corals as if it were still in the act of growing, but its interior shows that it is a conglutinate stone the calcareous matter, which is very hard serving as a cement for many nodules of different natures. I observe two essential differences in the component parts. Some masses resemble a porphyry changed into calcareous matter, like the stone of Monihari. In this are involved many nodules large and small of the hornblend or Tiliya⁽⁴²⁴⁾ in perfect preservation. The other is a kind of breccia containing in a tufaceous cement many pebbles of various natures and sizes. The most common are the indurated reddle, called Geru by the natives, but I observed others that appear to be hematites the two substances being nearly allied. In this I have never seen any nodules of hornblend, nor have I seen any sporadic masses of the Geru or hematites in the vicinity, still less any rocks. In the interior also the

(423) I.e. having small protuberances like nipples (Lat. *mamilla* a teat nipple)

(424) The *tiliya* above (note 420)

tufa is very common, and in many places has been dug for making lime. In general there it is found in very small rounded nodules, mixed with the earth. Wherever these nodules are of any considerable size, such as that of the fist, they are covered with mamillary processes like corals. In the cave at the Madrissa, although the surface is covered with the tufa in mass, containing nodules of hornblend, the sides consist of small knots of Tufa slightly united by a crumbling calcareous crust, a form in which I have nowhere else seen this substance.

15th January —I went to Taruya⁽⁴²⁵⁾ hill to return the visit of Katku Naib, who has learned to write the Hindi character. His village is not so large as that of Guiya Sirdar, but contains at least one hundred people. He has a son, a lad, a daughter married, and ten boys and girls. He has built a mud hut, the only one of the kind among the hills, but it is not so large as that of the Sirdar. I saw no furniture except a number of cots without bedding. As a principal ornament he had preserved the under jaws of all the wild hogs that he had killed, which were very numerous, perhaps a hundred, few of them had large teeth. Also the horns of all the deer, ten or twelve axis,⁽⁴²⁶⁾ and four or five Murgosh ⁽⁴²⁷⁾ He had also the jaws of twenty or thirty porcupines, that had been killed by his son. These are numerous and are eaten. They reject snakes, guanas, and few will eat sheep. The village is fixed, but they cultivate only three years, and then give a fallow of six or seven. He claims much of the territory between his hill and Teliyagori. The great crop is Mukayi, which is the common food of the hill people. They have no remembrance of its having come from any other country, though until its propagation they must

⁽⁴²⁵⁾ This appears to be the little hill adjoining **Mundwa** *urf* **Tundwa** village of the S S. Buchanan's Taruya possibly represents an original Tundwā from *tūndā*, 'broken off at the top', 'like a stump', having much the same meaning as *mūndā*, 'shaven headed'.

⁽⁴²⁶⁾ *Cervus axis*, the spotted deer, *chital* or *chitarā* in the vernacular.

⁽⁴²⁷⁾ This word has not been identified. Possibly the barking deer is meant.

have been badly off Here they raise no cotton and chiefly a little orrhor and ricinus⁽⁴²⁸⁾ among the maize Snakes are very numerous among the hills They showed me a hollow place, in which they said one of a vast size dwelt in a hole They said it might be four or five feet round and eighteen or twenty cubits long⁽⁴²⁹⁾ All the cold season it lives in the hole In the hot season it comes out, and lies, near its mouth, in a hollow place shaded by trees It feeds on wild hogs and deer and the people conceive that any person who molested it would incur the heavy displeasure of God or rather that the serpent is a God They imagine that it will do no injury to them and that a child may tread on it, without its taking any notice or being irritated This they attribute to its understanding their language Such serpents are said to be pretty numerous among the hills That is one may be found in every two or three villages I enquired however afterwards at several villages and could not hear of any such The hill people were formerly employed at the indigo work⁽⁴³⁰⁾ but a new colony has come from the Nagpur hills, who are acknowledged to be more active and laborious, and these have a just preference The hill is everywhere covered with detached blocks and masses of a fine-grained whin approaching to hornstone but the interior of the hill consists of a continued rock of hornblend in mass with large crystals A great deal has been quarried and left in a large cavity This is supposed to have been done in the Mogul government

About three years ago some wild elephants⁽⁴³¹⁾ came upon the hill The people attacked them with

(428) *Ricinus communis* Castor-oil plant (vernacular *rengh* *rengh* etc.)

(429) Compare with this T Mott's account of the great snake, Naik Buns near Sambalpur (*Asiatic Annual Register* 1799 Misc. Tracts p 79)

(430) A factory belonging to Mr Glass surgeon of Bhāgalpur

(431) Further details as to wild elephants are given in the Report. See *Martin's B I* II 145 and Appendix 7

their poisoned arrows; but these produced no effect. If they had muskets, they say that they would kill these destructive animals.

16th January — I went to Paterghat⁽⁴³²⁾ rather more than twelve miles. For almost a mile I followed the old road by which I went from Paingtī to Bhagalpur. Paingtī is a much more considerable village than I supposed when I visited it first. I then crossed only its breadth. It has a street closely occupied, mostly by shops, and extending almost half a mile in length. The district adjacent is not above three quarters of a mile square. My road led for about 1½ mile along the hilly ground near the river. I then came to a low plain intersected by a small nullah, called the Penguya,⁽⁴³³⁾ which I crossed about two miles from Paingtī but had it towards my left for some way. My road afterwards led along the plain, which is not wide, and most of the way I had on my right an old stagnant channel of the river, in some places containing water, in others almost obliterated. The plain, for about four miles, is very low, with few trees, being inundated. Afterwards it rises, and is finally mixed with plantations. Scarcely any bamboos. The villages bare and miserable, but large. The people dirty.

Paterghata, or the stone landing-place, is properly a rocky promontory, that projects into the Ganges, but communicates its name to a small hill that is adjacent. Immediately contiguous to this hill is a smaller named Uriup⁽⁴³⁴⁾. The rocky promontory consists of a fine large grained granite, white felspar and quartz, black mica with certain flakes of red felspar intermixed. It extends across a branch of the Ganges, and at this season a mass of it appears there.

⁽⁴³²⁾ Patthaighāt, from *patthar*, 'rock', and *ghāt*, a 'landing place'. Strange to say, the name of this well known site does not appear on the 1 in = 1 mi Survey sheet (1910), nor on the latest 4 mi = 1 in map of the district.

⁽⁴³³⁾ Not marked on the S S, but the courses of the channels in this area between Pattharghāt and Pāintī have greatly changed since Buchanan's time.

⁽⁴³⁴⁾ The small hill marked to the west of village Oriap on the S S.

above water At the ghat the granite is alive, in fine masses from whence large stones might be cut for buildings It continues for some way east to form the basis of the hill but gradually as it advances towards the east becomes more and more decayed, until at length it becomes a white crumbling substance In some parts this has a vertical shistose appearance, in others there is a kind of confused tendency to the appearance of horizontal strata but no one can doubt by tracing it from the cape, that the whole has once been the most rude and solid granite Under the temple of Bateswor⁽⁴³⁵⁾ it is in the greatest state of decay and cannot be traced much farther Higher up the hill at and above the temple of Bateswornath and extending from thence to the eastern end of the hill is a rock more evidently disposed in horizontal strata It consists of grains like a sandstone, but is very friable and in some parts porous It does not however seem to decay fast on exposure to the air, and as some of the strata are large masses for building might be perhaps readily procured while by digging to some depth the quality might improve It may perhaps be decaying granite and is of various colours from red to white and the extremes of these colours often are found on different sides of the same mass Higher up the hill the strata are most decidedly horizontal and many of them near the surface are very thin from half to two inches thick, but others are considerably thicker and one mass on which many images are carved is about three feet thick and very compact This stone is granular harsh and brownish The grains are small of various natures and I would call it a *regenerated granite* It seems when the strata are thick, to cut well, and to resist the weather remarkably, as the images have stood entire for some ages

Immediately adjacent to the surface and often exposed to the air for considerable spaces is calcareous

(435) The lord of the fig tree (*vafa* the Banyan *Ficus indica*) Just below we have *Vajedvaranātha*, the addition *nātha* also meaning lord being redundant; but such redundancy is quite common. *Siva* is worshipped under innumerable local names.

tufa, often adhering to the regenerated granite, and penetrating its fissures. It is sometimes merely a thin crust, as in the specimen, but in others it is a foot, or even two feet thick, branching out like coral, and sometimes involving various pebbles, at others it is without any mixture, and is exceedingly hard.

On the promontory of granite are some small carvings in relievo, but so rude, that it would be difficult to say what is meant. One seems to represent Ram with Sita⁽⁴³⁶⁾ sitting on his knee. East some hundred yards from the promontory, and on the face of the hill is the temple of Bateswornath, built of brick, and newly repaired, but a small and rude edifice. Returning from thence west, and thus winding to the top of the hill, you come to an Idgayi⁽⁴³⁷⁾ built of brick, and as usual ruinous. By the way you pass several cells cut in the mouldering sandstone, and occupied by penitents (Topisiya)⁽⁴³⁸⁾. Descending from the summit considerably, towards the west, you come to⁽⁴³⁹⁾ , where a great many figures are cut on a perpendicular mass of regenerated granite about thirty feet long and three feet high. The engravings represent Vishnu riding on the bird gurunor,⁽⁴⁴⁰⁾ Rama, Sita, Hanuman, and a vast number of attendants and partisans of the sect of Vaishnav. The images are exceedingly rude, and have gone through the hands of Kalapahar⁽⁴⁴¹⁾. West from

(436) More probably Śiva and Pārvatī (Haragaaurī)

(437) i.e. 'īdgāh, the place (gāh) where a solemn festival ('īd) is held

(438) i.e. *tapasiyā*, the vulgar form of *tapasī* (Sans. *tapasvin*), an 'ascetic'

(439) Blank in the MS

(440) Garuda, chief of the feathered race, the vehicle of Viṣṇu

(441) Kālāpahār. For this notorious man, first a general of Sulaimān Karārānī and afterwards of Dāūd Khān (the Afghān Kings of Bengal), who conquered Orissa in 1567, where, after 3½ centuries, his name is still held in terror, see *Riyāzu's Salāṭīn* (trans. by Abdu's-Salām), pp. 15—18, 163, 165, *Āin-i-Akbarī* (trans. Blochmann and Jarrett) I, 370, II, 128, etc. Buchanan's allusion will be better understood from what Ghulām Husain (author of the *Riyāzu's-Salāṭīn*) writes in connexion with the subjugation of Orissa, namely

"Of the miracles of Kālāpahār, one was this, that wherever in that country the sound of his drum reached, the hands and the feet, the ears and the noses of the idols worshipped by the Hindus fell off their stone figures."

Kālāpahār ended his days somewhere in this neighbourhood, between Kahalgānv and Rājmahāl, in a fight with 'Azīz Koka in 1582.

thence some way, is a cave, which many of the natives suppose to extend to Dorhora⁽⁴⁴²⁾ half a coss distant, but this is extremely doubtful. It seems rather to have been a cell or set of cells, which some hermits had formed by digging the earth or clay from under the regenerated granite and which was interposed between that and the friable sandstone. The roof, at any rate has in many places fallen in, and if there was any subterraneous passage it has been choked.

17th January — I went first about two miles in an easterly direction and partly by the way I came yesterday to a place where a saline earth named Kharwa⁽⁴⁴³⁾ is found a little west from Diabatī⁽⁴⁴⁴⁾ tank. About a mile from Patarghata I passed a tank at the east end of which is a large monument of brick called the Kazi's Dorga. It has become ruinous, but has an endowment. The space occupied by saline earth may be two hundred yards long, but is narrow. It is situated on a plain mostly cultivated, and the crops on the saline earth are very good. Washermen use it in place of soap and people from Purneah are said to come and scrape the surface to give to their cattle. The cattle here are said to lick the surface. These are all says. I saw nothing on the spot to indicate that any was collected or that any saline matter existed. I then went about half a mile south-west to what is called the Dorohor⁽⁴⁴⁵⁾ and is supposed to have been a Rajah's house. It appears to me to have been always a round hill perhaps fifty feet in perpendicular height but without digging it would

(442) Not marked on the S.S. I can find no reference to this site by any archaeologist. The famous Vikramāśīla Buddhist monastery founded by King Dharmapala, and described by Tārānātha, the Tibetan historian is thought to have been situated at or near Pattharghatā. Buchanan's description of the remains he saw especially what might have been a solid temple (i.e. a stūpa) and the square fortification (possibly the enclosure walls) makes it clearly desirable that exploration trenches should be dug.

(443) i.e. *kharī mīṭī*, saline earth. It is noticeable that Buchanan in his account of Pattharghatā makes no mention of the pottery clay of which the supply according to Dr V Ball is practically inexhaustible. Ball also tells us that pottery works have from time to time been in operation at Pattharghata for the manufacture of drainage pipes etc. [*Geology of India* Pt. III *Economic Geology* (1881) p. 565.]

(444) Not marked on the S.S.

be impossible to determine positively whether or not it may not have been a building. If it has been a building, it, in all probability, has been a solid temple, no house in decay being capable of leaving such a ruin. There are traces of a square fortification round it, and the surface of the earth within that is covered with broken bricks. Many squared stones, one very long, are lying in various parts of the vicinity.

From Dorohor I proceeded west, between Murlī and Paterghata, for about a mile and a half, until I came near the river, and turned south between that and the ridge of hills consisting of Murlī Chondipur and Modiram,⁽⁴⁴⁵⁾ having before me Gongoldei⁽⁴⁴⁶⁾ and Kahalgong. The situation is remarkably fine. At the south or upper end of this ridge I came to a large village named Kasdī,⁽⁴⁴⁷⁾ leaving on my right the indigo factory of Gongoldei, belonging to Mr Murchieson,⁽⁴⁴⁸⁾ in a most delightful situation near a branch of the Ganges. From Kasdī⁽⁴⁴⁷⁾ I went to the southend of Madiram, in order to examine a quarry of the Khorī⁽⁴⁴⁹⁾ matī that is used in instructing children to write. The root of the hill, for perhaps eighty feet, consists of a rotten rock disposed in strata nearly vertical. Some of them consist of a reddish brown stone with many plates of mica, and evidently of the same nature with what I have called regenerated granite at Patarghata. It comes nearer shistose mica than any other stone I know. Intermixed with these are other strata of imperfect Khorī, partly reddish, partly white, but

(445) These are the names, as told to Buchanan, in order from north to south, of the three peaks of the ridge of hills shown (but not named) on the S.S. about 4 mi. N.E. of Colgong.

(446) Not marked on the S.S., but Gungleddeeh [indigo] Factory is shown on Sherwill's Rev. Sur. map of 1852, 1½ mi. N.E. of Colgong. Gunguldee is also shown as an indigo factory on Tassin's map of 1841. *Gangālā* means land subject to inundation by the Ganges, *dīh* is a Hindi word for a 'village' or 'village site'.

(447) **Kasrī**. This is the Caushdee of John Marshall (1670) and the Cossee of Rennell (1773 sheet).

(448) "Simon Murchison, indigo manufacturer, Bhaugulpore" (*East India Register*, corrected to 18th. December 1810).

(449) i.e. *khārī*, chalk, not to be confounded with *khārī mittī* above (note 443).

I have no doubt that it is the former stone in a farther state of decay. Above this for about one hundred and fifty feet, the hill consists of horizontal strata, mostly of imperfect Khorī, of various tinges of white red and purple. Some of it fine-grained and compact but many portions and these contiguous to the most perfect are granular and friable like the sandstone of Patarghat, and retain evident traces of a granitic origin. The Khorī has been dug out in two places, one about forty feet above the other. The stratum in each has been from three to four feet thick perfectly horizontal and extending into the hill to an unknown length. The roof and floor of both are imperfect Khorī. The natives dug into the lower one without leaving any pillars to support the roof, until that fell and choked the quarry. About three years ago they went to the upper, and have already made a large excavation perhaps twenty feet each way and will continue to enlarge it until the roof falls when they will look out for some other place. The precaution of leaving pillars cannot be expected in their present state. The Khorī in these strata is perfectly unmixed and of a uniform pale ash colour. Above the upper quarry is a horizontal stratum of a few feet in thickness which entirely resembles what I called regenerated granite yesterday but which differs only from some shistose micas in having horizontal layers. Some of it as at Patarghata seem to be more impregnated with iron or to be iron shot as it is called. Under the lower quarry, but having imperfect Khorī both above and below it is a stratum about a foot thick of the same substance with the shistose mica above and below, but having imbedded in its substance many small fragments of white quartz. This shows the transition of the same materials to Ghera⁽⁴⁶⁰⁾ matī as two pieces of this rubbed together leave a bright red stain. It strongly approaches the stone incumbent on the Khorī at Khalipahar, the southernmost point of this range of hills. The mass of granite

(460) i.e. *gerā*, red ochre; ruddle or reddle. Buchanan spells this word in a variety of ways.

at Patarghata is the only one that I have seen in the whole extent of this range, and projects under its northern end, just as the granites towards Chandrapur do from the south. The most singular thing in the quarry at Moderam is that materials, which I have no doubt are the same, and coeval, should in the lower part be disposed in vertical, and in the upper part, horizontal strata. I suspect, that the nature of stratification will in fact be found as often to depend on the cause of dissolution in stones, as in the causes of their aggregation.

Above the quarries the hill rises to a considerable height, which I did not ascend, because its surface appeared to be covered with soil.

From Kasdi I went to Mr Glases [*sic*] factory of Bader,⁽⁴⁵¹⁾ very near three coses,⁽⁴⁵²⁾ crossing near Kasdi a small rivulet named Bagaiya,⁽⁴⁵³⁾ which is said to have come from the hills of Moniyari. I had on my right, Gongoldai,⁽⁴⁵⁴⁾ on which there appears to be blocks of granite. From the factory I returned east by the great road from Paingtī to Kahulgang until I passed the hill of Bader, about two miles. I then turned to the right, and went over a swelling country for about $4\frac{1}{2}$ miles to Buddlegunj⁽⁴⁵⁵⁾.

The road from Bader to Budlegunj is good, and seems much frequented. By the way I met an invalid sepoy, and two sepoys' widows begging.

(451) **Bhader**; the Baidur Chokey of Rennell

(452) Apparently a slip for "miles"

(453) Marked (but not named) on the S S as only some two miles in length. It looks as if this was an old outlet channel of the Koā Nālā (see Rennell's *B A*, Pl II, Tassin's map of 1841, Sherwill's map of 1852)

(454) The factory was situated to the SW of this little hill, close by

(455) **Badluganj**. It is a curious thing that Faizullāhganj, from which the police Division of Buchanan's time took its name, is not to be found on the modern maps. It is marked on Tassin's map of 1841 about 2 mi. S by E of Badluganj. Buchanan, in his *Index to the Map*, does not mention it as one of the towns or villages in the Division of the name Badluganj, nearby, evidently outgrew it and superseded it. This area from the time of Todar Mal lay in Kahalgānv mahāl or pargana, and why the name Faizullāhganj was ever given to the Division is a mystery. The name does not appear on Rennell's maps.

Specimens of the rock from Bader were brought to me. They are a fine large-grained granite, white or reddish felspar, white quartz, and much black mica.

A village of hill people is at the root of Bader. They formerly cultivated the hill, but of late have desisted. It is alleged that their crops failed for two or three years and that they were persuaded that this arose from the wrath of the deity offended at beef-eaters approaching her temple.

The Sirdar of Monihari⁽⁴⁵⁶⁾ and his Majhis say that the native title of Sirdar is Mula⁽⁴⁵⁷⁾ and that for time immemorial the Mula settled disputes among his dependent Majhis. The office of Mula was seldom properly hereditary, the most powerful and able Majhi usually seizing the authority. The Majhis were always hereditary. Among the hill people merchants (Grihi) bear a distinguished rank and there may be two or three in each Tapa, who buy up grain and other commodities at harvest and lend them to the necessitous who pay double at harvest. These are often merely Priyas⁽⁴⁵⁸⁾. The whole land seems to be the common property of the tribe; each man may cultivate any land that is waste on his own hill. When there are many people and little land some go and attach themselves to a Majhi who has few men and much land. They cultivate maize chiefly next Janera⁽⁴⁵⁹⁾ then Bora then Orrhor, but all together in the same field. These they cultivate two years.

(456) i.e. of *ṣappa* Manihārī (not the zamindārī portion); the Minniharī of Browne; now forming the northern part of the Goddā subdivision. Buchanan gives an interesting account of the history of this *ṣappa* in his Report. The town of Manihārī which gave its name to the *ṣappa* was originally the headquarters of an important Kṣatriya family. It is marked as Munheerā on the old Rev. Sur maps but the name does not appear on the modern S.S. (722)! The old land marks are disappearing in many directions.

(457) This is evidently the Sanskrit word *mūla*, root, basis, which in composition means prime, chief, etc.

(458) i.e. *prajā* see note 398 above.

(459) By *janera* Buchanan means *juar* (*Zorgbaum vulgare*) the Indian or Great Millet, often called *janhari* in Bihār. The name *janera* is also applied to Indian Corn or maize (*Zea mays*) ordinarily called *makāi* in Hindi.

on the third they sow cotton, and then leave the field waste A fallow of eight to twelve years The children always separate from their family when married, so that there can only in general be one man in each family In some villages are only two houses and still a Majhi In none more than sixty In each Tapa one or two such The usual rate ten or twelve houses, and fifty or sixty people Each man and woman may cultivate five or six bigas They think in Monihari that there may be two thousand houses Although there is much plain land among the hills that they do not touch, there is much more hill than these families can cultivate They begin to work at eight The women never pray nor make any offerings, nor are they allowed to be present at sacrifices, nor to partake in the offering, but they join in the feasts after the sacrifices that are given at funerals and marriages In the sacrifice to Chaldei, when the priest (Erwa)⁽⁴⁶⁰⁾ is returning home from the sacred place with the men, they are met half-way by the women, who surround the priest's wife, who is naked except a very narrow cloth round her waist The other women sprinkle her with water and turmeric

19th January —I went four coses or rather more to Hobipur,⁽⁴⁶¹⁾ about five coses west from Paingtī, in order to see a place where Kurwa⁽⁴⁶²⁾ mati is scraped by the washermen It is on the beginning of the plain, just below where the swelling land terminates, in a rather low place, about fifty yards in length and twenty wide Between it and a creek which joins the Ganges are some fields rather higher than the saline space, but the floods rise over the whole three or four days in the year, covering the saline space from knee to waist deep, and of course washing away every saline particle In the month of October, however, the saline matter begins to effloresce on the surface which is covered with short grass The washermen

⁽⁴⁶⁰⁾ The Erebu above (see notes 386 and 388)

⁽⁴⁶¹⁾ **Hobipur**, about 3 mi ESE of Pattharghatā Buchanan might have visited the site more easily from the latter place

⁽⁴⁶²⁾ The Kharwa earth of the diary of 17th January (see note 443 above)

then scrape the surface and beat the saline matter from the roots of the grass. This may be done at any time throughout the dry season, but none is procurable during the rains. The most singular thing is that near the middle of the field I found a small well apparently lately dug. It was not more than three feet deep, and contained about one foot of clear water which is sweet and is used for drink. I was assured by the inhabitants that similar water may be procured in every part of the saline space, and that every year those who labour the adjacent fields dig a well such as above mentioned which gives them a supply for the dry season but is filled up by the subsequent floods. The saline matter is therefore constantly forming and that entirely at the surface, but I shall not take upon myself to say whether or not entirely from the atmosphere, or risen from terrestrial vapours containing the basis of soda which will instantly become soda on exposure to the air.

I saw three antelopes bounding past, but they do not go very fast. The bounding seems to be superfluous as they were running on clear land free of long grass or bushes.

The people as usual very clamorous against the indigo planters. They said that formerly it gave very great crops, but then it was weeded thoroughly and manured. Eight carts at half a rupee each, the bundle of $3\frac{1}{2}$ cubits valued at one-thirteenth of a rupee, was a common crop from a bigah of six cubits⁽⁴³⁾. Now three carts may be a usual crop. One half is reserved for seed and not cut. It gives about two mans a bigah for which they get at the rate of three rupees. The raiyats are terribly in debt especially to Mr Murchieson, which keeps them in great subjection.

(43) A bigah contains 20 kaffhas and each kaffha contains 20 dārs. A dār is the square of a laggi, or measuring rod. So the size of a bigah varies according to the length of the laggi, which is different in different parts of the country. Here the laggi was about 9 ft. long.

Badalgunj is a pretty considerable village near a small hill, from whence there is a very fine view, and it rises from the village with a very gentle acclivity

20th January—I went about $14\frac{1}{2}$ miles to Sripur,⁽⁴⁶⁴⁾ and was delayed until late by rain, which fell in the night and morning, accompanied by much thunder. Towards the hills it seems to have been very heavy. The swelling ground, on which Badalgunj stands extends from thence almost six miles, and seems to have been once well cultivated. About five miles from Badalgunj is a hat named Dighi ⁽⁴⁶⁵⁾ a poor place. From thence there is a fine low country, much intersected with water-courses, for rather more than seven miles. Some of the villages are very large but poor. Mowara,⁽⁴⁶⁶⁾ the residence of Gujeraj, was a little to my left, in a prodigious fine situation. His house consists of sundry huts, larger than common, and is surrounded by a fine grove. It stands south from a considerable detached hill. Most of the plantations ruinous, and the villages naked. The remainder of the way was through a country inclined to be hilly, like Banka, etc., and mostly covered with woods. The principal nullas that I crossed, in the same order, were Nurariya,⁽⁴⁶⁷⁾ about $7\frac{1}{2}$ miles from Badalgunj, Jumariya,⁽⁴⁶⁸⁾ about two miles farther. This alone contained a stream, which runs towards the right. The Koya⁽⁴⁶⁹⁾ about two miles farther.

21st January—I went and returned to and from Manjuya,⁽⁴⁷⁰⁾ distant about $7\frac{1}{2}$ coses, but the route winds very much. In going I intended to note the appearance of the country, and in coming back to take specimens of the stones, but about half way back

(464) Sripur Bazar of S S

(465) Dighi *Hāt* means 'market place', 'mart'

(466) Mandro Bazar and Marro of S S. Gajrāj Singh was the *sardār* of *tappā Manihārī* in Buchanan's time. (See also under date 18th January.)

(467) Further west, called Leharla N. and Lohra N. on the S S

(468) The Pindai N. of the S S

(469) Koa N.

(470) Majhua. Here also "coses" is a slip for "miles", as Majhuā is some $7\frac{1}{2}$ miles from Sripur. From Buchanan's description and from a rough sketch map of his route inserted in the MS, it seems practically certain that his Majuya was the Bario, and his Chupgong the Majhua of the S S.

a tremendous storm of wind and rain prevented me from taking any specimens of those on the western part I must therefore speak of them from a transient view From Sripur for about $2\frac{1}{2}$ miles, the ground is swelling and free of stones It seems to have been formerly cultivated About a quarter of a mile farther there is a short and steep stony ascent Potor Choti,⁽⁴⁷¹⁾ a conical hill the first of northern ridge The southern ridge not in view from thence This however may be considered as the commencement of the valley Some way farther on the valley narrows much between Duseri⁽⁴⁷¹⁾ on the north and Gosayi⁽⁴⁷¹⁾ on the south where at the west end of these hills it is not above two miles wide It is very stony and uneven, but the road is not deep The rocks have no appearance of stratification, but break into cuboidal masses which are soon rounded by the action of the air I took them to be whin but did not break them These two hills as they advance east recede, and the valley becomes much wider Where it begins to widen, the rock is an immature Khorī or rather a stone not decayed into Khorī It splits into oblong quadrangular pieces of small size by natural fissures and has rather the appearance of vertical strata About six miles from Sripur a small stream comes from the hills to the north, and runs south to join the Morar⁽⁴⁷²⁾ From thence onwards to the Kumeri,⁽⁴⁷³⁾ another similar rivulet but larger there are few stones and the soil is a red clay Until the first stream the soil is brown and not stiff At the Kumeri the rock is a whin containing felspar and quartz with no appearance of strata It is in a state of decay Beyond the Kumeri rather more than a mile is another rivulet and rather less than half a mile farther, is the Bunmasiya⁽⁴⁷⁴⁾ another stream Between these and near them the rocks are evidently

(471) Unfortunately no hills are marked on the S.S. so the exact road followed cannot be traced.

(472) Marai M. (S.S.).

(473) Not named on the S.S.

(474) Probably this should read Bāramasiyā, as there is a village of this name near Buchanan's route.

horizontal, and consist of the unripe Khorī, in plates under a foot thick. In one place I found it changing into a kind of rotten sandstone, one part of the same mass being in one state, and the other in the other. The sandstone therefore on the banks of the Ganges at Sakrīgali is probably Khorī in a state of change. Some way farther are many blocks of whin, in a different state of decay, exactly in external appearance like those I supposed to be whin at the western end of the valley. The land here is much broken, and the soil resembles somewhat dark ashes. About ten miles from Sripur is another rock of unripe Khorī, with a vertical appearance. A little west from it and apparently under it, is a whin in decay, no stratification. About eleven miles from Sripur the hill called Dumara⁽⁴⁷⁵⁾ comes close to the road on the north side, and forms the angle to the valley of Manjuya, between that and Banspahar,⁽⁴⁷⁶⁾ on the opposite side of the valley, may be five miles. About a mile from this I came to Chupgong,⁽⁴⁷⁵⁾ about half a mile before which the stones entirely cease, and the whole way from thence to Manjuya, is a very deep dark friable soil. The rocks from Dumara to Chupgong are all whin. Chupgong, formerly a large village, now contains one hut. From thence is about $1\frac{1}{2}$ mile, through a fine country formerly cultivated, to a deep stagnant channel named Dakuja,⁽⁴⁷⁵⁾ and a little beyond that is another named the Gordoya⁽⁴⁷⁵⁾. Immediately beyond that commences the ditches of Manjuya, which extend to the east about a quarter of a mile. From the south-west corner I proceeded up the east side to the north gate, about half a mile. On the whole, the only rocks that I examined, and I believe the whole that I saw, are of two kinds. One whin, that is a lapis corneus of Wallerius, containing shorlaceous crystals, and small masses of quartz, and I believe some of felspar. It is in various states of decay. In one place it appeared to me disposed in

(475) None of these names appear on the S S, but Dumara may be Danware. If so, Buchanan must have taken a roundabout route

(476) Banspaharī (village)

horizontal strata, but so broken by fissures, that I cannot be positive. I have in no other country seen any such. The other rock which I have called imperfect Khorī seems to me a *Petrosilex*⁽⁴⁷⁷⁾ beginning to decay. It is separated by fissures into small portions, but these when broken have the conchoidal fracture, which even the Khorī although very soft, retains. Some parts retain the horny colour others have become white and others finally are coloured in parallel stripes like some of the mature Khorī. In some places instead of assuming the soft grain of Khorī, it takes the appearance of a soft sandstone. In decay and exposed to the air it retains its angles much longer than the whin all detached masses of which become immediately rounded. In the fissures of neither rock could I perceive the smallest appearance of venigenous fossils nor of the exuviae of animated matter.

Three substances in detached nodules, or masses are very common over every part of the stony extent of the road.

The first is the Gangot or small white calcareous nodules. In general it is found in soil that is deep and contains no other stone but this is not universal. It is however so common that the intermixture may be perhaps considered as accidental.

The second kind of detached nodules are of a flinty nature some opaque some pellucid and of various colours white, hyaline⁽⁴⁷⁸⁾ horny uniform and in layers partly parallel partly concentric. Some of the pieces are flat as if detached from a shistose rock others are cylindrical. In one or two of those that are opaque I thought that I could perceive traces of vegetable impression and on one that was diaphanous somewhat like the pores of a coral. One of the most common appearances which these nodules assume is a flint-shaped mass five or six inches in diameter of a smooth red external coat but within

(477) Rock flint or hornstone.

(478) Glassy or transparent.

white, and approaching very near in appearance to the petrosilex in decay. Many of the diaphanous pieces, like chalcedony, have their surface covered with crystals. These may be fragments of the petrosilex, but, if so, they must have undergone great changes, especially those which are cylindrical and diaphanous.

The third kind of sporadic fossil is generally in pretty large masses, but all detached. In one part, however, the masses are almost contiguous to each other, and may be the fragments of a rock in decay. This very evidently is the same slaggy substance that I have seen on every part of the hills, and I have no doubt is a lava, probably fused whin.

These two last kind of nodules, and many detached lumps of whin are often covered with the kind of enamel that I have before mentioned, while many are free from such a coating; but wherever one stone is enamelled, the same extends over all for a certain space.

Majhuya is now a miserable village, occupied by a few Ghatwals and their Paiks, who carry on some cultivation, but a mere trifle. It was the residence of the ancestors of Gujeraj Singh, who had a brick house surrounded by a wide ditch, and south from thence, a place for recreation surrounded by the same ditch, but separated by a transverse cut. It is about half a mile west from the Morar, a small river, which receives the springs of all the hills towards the north, and rises from a hill named Sislari,⁽⁴⁷⁹⁾ eight coses north from Manjuya. It passes south through a fine plain, and a district called Tapa Dihar,⁽⁴⁷⁹⁾ that was cultivated with the plough. From thence it proceeds south through Tapa Majhuya, which between Dumara and Bandurkola⁽⁴⁸⁰⁾ may be four miles wide, and I believe the width increases towards the south. Tapa Majhuya extended south to Behasi⁽⁴⁸¹⁾ at least, and that is four coses. From Behasi to the hill called

(479) None of these names appear on the S S

(480) **Bandarkola.**

(481) **Beansi.**

Panuk⁽⁴⁸²⁾ is four coses from Panuk to Chuna Khali⁽⁴⁸³⁾ four coses. The road to Behasi is now almost choked, and Panuk is more difficult of ascent than Chaundi⁽⁴⁸⁴⁾. Between Chaundi and Bandur kola the residence of Bika Sirdar is a wide valley, and a river called Chukrado,⁽⁴⁷⁹⁾ a branch of the Morar but this valley was never occupied. The road to Chaundi goes round the south end of Bandurkola, through the plain which renders the distance six coses. Bika Sirdar's village contains about fifty houses, and from two hundred to two hundred and fifty people. Most of the men came to see me, with his brother Rupa. The Morar flowing through a very deep soil without a single stone in it has cut a very deep but narrow channel. It always contains water which though nearly stagnant is not navigable. About eight or ten coses south from Manjuya it receives the Jauna⁽⁴⁷⁹⁾ which rises from a hill of Parsunda,⁽⁴⁸⁵⁾ called Puro⁽⁴⁷⁹⁾ belonging to Dulo Majhi and joins the Morar at Babupur⁽⁴⁸⁶⁾ where there are some Ghatwals. Babupur is in Tapa Payir Puchkuliya,⁽⁴⁷⁹⁾ which was formerly cultivated with the plough. The united stream is called Guman Merden, is navigable in the rainy season and, before it leaves the hills, has on the banks another Tapa named Kunjela⁽⁴⁸⁷⁾ now waste. These four Tapas are not considered as belonging to any Thanah and belong entirely to Gujeraj Singh but I believe he has no profit from them. I do not think he has one raiat in them. He pays no revenue. They were no doubt depopulated in consequence of the disputes with the hill people who were first set on to plunder by his father. Some allege the elephants as the cause of the continuance of the depopulation others, the want of

⁽⁴⁷⁹⁾ None of these names appear on the S.S.

⁽⁴⁸²⁾ Tulma (Panuk).

⁽⁴⁸³⁾ Chumakhallighat.

⁽⁴⁸⁴⁾ Chamdi.

⁽⁴⁸⁵⁾ I.e. Jappa Patsunda (see Gazetteer).

⁽⁴⁸⁶⁾ Babupur.

⁽⁴⁸⁷⁾ The Kunjoola pargana of Sherwill; the Kängjyälä Jappa of Buchanan's Report. See also Buchanan's map. The name represents the *Ko-chu-wa k-si-lo* of Hsüan Tsang and survives in the modern Kängjol village occupying an ancient site on the south bank of the Gumāni mardan R. some 6½ miles W by S. from Farakkā.

barbers and washermen, without whom the higher classes will not go Both seem to admit of an easy remedy

At Sripur I was visited by Gujeraj,⁽⁴⁸⁸⁾ a thin emaciated man, equally weak in body and mind, but perfectly tractable His brother is in a state equally deplorable He was accompanied by a Dewan, a servant of the family for fifty years, and in his seventieth year, a sensible, active man He remembers the family residing at Majhuya The zemindary is managed by an Izaradar,⁽⁴⁸⁹⁾ appointed by the Collector, the Jaghir by a Tahsildar, both, especially the latter, seem totally inattentive to their duty. Sripur is a station of the Ghatwals,⁽⁴⁹⁰⁾ where there are two or three wretched huts It stands on the north side of a small hill of the same name, just where the soil becomes stony The stone approaches near to whin, but is more evidently an aggregate, consisting of black angular masses, perhaps hornblend, and micaceous iron ore, intermixed with white quartz, but it is in a state of decay, and like the lapis corneus, is very tough

22nd January.—I went about $9\frac{1}{2}$ miles to Protappur,⁽⁴⁹¹⁾ through a very fine level country, of a rich soil, occupied by Ghatwals The cultivation very bad, and their houses wretched Here, however, they are active, good-looking lads, Not pahariyas, the same with Beor Bhuiyas, Bonwars,⁽⁴⁹²⁾ etc Almost all armed with bows, in the use of which they have little dexterity The hills to the south take a large sweep

(488) Gajrāj Singh, son of Sujan Singh, a descendant of the Kṣetaurī Rūpakaran, who is said to have assisted Mān Singh in Akbar's time (see *Gazetteer*, 1910, p 269)

(489) *Ijāradār*, a 'lessee' or 'farmer' of land revenue

(490) Ghaṭwāl literally means a person holding charge of a pass through the hills For a description of these tenures in the Santal Parganas, see *Gazetteer* (1910), pp 219—21

(491) **Pratabpur Gausi.**

(492) "A small caste, probably of Dravidian descent, found in the Santāl Parganas" (Risley, *T & C*, I, 61) The name, however, is used elsewhere in South Bihār in an occupational sense—people who work for a daily wage of grain (*ḅan*), and also, loosely of *jaṅgal* folk (*ḅan*, forest, woods, etc)

towards Parsunda,⁽⁴⁹³⁾ leaving an opening there between them and the cluster near Protappur, which stands less than a mile from their north west angle and is the only zemindary lands I saw to-day. About two miles from Sripur I crossed the Kumba⁽⁴⁹⁴⁾ a deep but narrow channel, and three miles farther I crossed another called the Duliya⁽⁴⁹⁵⁾. My people who went direct from Buddlegunj to Protappur had also had the terrible squall, which had injured most of my tents. At Budalgunj there was hail like apples⁽⁴⁹⁶⁾.

By the way I saw five spotted deer and an antelope. This seems the most abundant place for game in the district.

23rd January — I went to Parsunda. About two miles from Protappur I struck off towards the left to visit an old mine of iron, that is on the western face of the hill next Protappur, but there it is called by another name Ram Koh⁽⁴⁹⁷⁾. About half a mile from the road I came to where the ascent becomes considerable and for about two hundred yards found, on a moderate ascent the soil mixed with small calcareous nodules (Gangot), among which were scattered many silicious nodules such as I have before described. On the ascent becoming steep the Gangot ceases and the surface is scattered with rounded masses of whin, among which also the silicious nodules abound, and there are also scattered fragments of the unripe Khorī which have assumed entirely its appearance, but still retain a great part

(493) Tappa Patsunda of the Gazetteer. The approximate position of this once important tappa may be seen from a reference to Buchanan's map but the name will not be found on any modern map. In his *Index of Native Words* Buchanan gives Parsandā परशदा as the spelling. As his Bengali assistant generally used the palatal for the dental s this would represent परसदा Parsandā and I have little doubt that this was the original name of the tappa.

(494) A tributary of the Koā nadi but not named on the S.S.

(495) An important tributary of the Koā but not named on the 1 in. = 1 ml. Survey sheet.

(496) Hailstones as large as this are of fairly common occurrence; but it is very unusual for such hailstorms to occur so early in the year as January.

(497) Not marked on the S.S.

of the hardness of Petrosilex. On one portion may be traced the concentric layers, common on the flinty nodules, which makes me suspect that in fact these are portions of the Petrosilex, that have changed their nature by some sort of external agency. One piece, however, that I procured is singular. It consists, as many others do, of two parallel diaphanous plates joined by irregular crystals, and seems to involve extraneous matter, which will perhaps serve to show that these silicious nodules are of a tufaceous nature. In the fissures of the whin there is not the slightest appearance of venigenous matter. Ascending some way, I came to a whin rock with many loose masses of the same, which continues to the mine, perhaps one hundred feet perpendicular from the bottom of the hill. No appearance of stratification. In this part there are neither detached masses of Khorī, nor silicious nodules. The mine ran in horizontally between the above-mentioned whin rock and another, scarcely, if at all, different, in which also there is no appearance of stratification. The fissures detaching masses of a cuboidal form. As, however, the mine evidently formed a horizontal stratum, the whin, above and below, may be also considered as horizontal strata, although of no great thickness. The ore is said to have been about seven or eight feet thick, and to have been wrought for about eighty yards into the hill, and as much in width, without leaving any pillars, when the roof gave way, and has choked up the cavity. Between the ore and whin above was a mass of dead rock, as the natives justly speak, about two feet thick. On the whole I saw no appearance of the slaggy volcanic-like masses. The mine was of two kinds, differing chiefly in hardness. The uppermost part was softest, as if in a state of decay, and was called Loliya ore. ললিয়া বিচ Laliya bich. The under part was reckoned best, and called Ghoriya. করিয়া বিচ Kariya-Bich. (498)

(498) Red and black ore, respectively, *laliyā* and *kariyā* being used in the vulgar speech for *lāl* (red) and *kālā* (black). Buchanan has written "ghoriya" by mistake for "kariya."

Having examined the mine, I returned to where I left the road to Parsonda, and then proceeded south about $1\frac{1}{2}$ miles to a dry small channel named Rajban ⁽⁴⁹⁹⁾ Beyond this the lands of Beliya, ⁽⁵⁰⁰⁾ a beautiful village belonging to the Ghatwals, extend to the boundary of Banka, rather more than two miles. The houses in Beliya are very poor, but have some plantations. South from Beliya a low ridge extends from east to west and forms the boundary between the two thanahs. From Beliya an opening between the cluster of hills at Protappur and those to the south east is distinctly visible. From the boundary to Parsonda is about five miles. Parsunda stands about a mile west from the end of another small ridge of hills which like the former runs east and west and terminates towards Parsunda in two peaks, or what seamen call Asses ears. Neither of these low ridges are occupied by hill people.

Jubro Naib of Chuprama ⁽⁵⁰¹⁾ hill says that he is a Mollay Moller. The Not Pahariyas will eat their food but are not allowed to marry their girls. The people whom I have formerly called Deoyai, ⁽⁵⁰²⁾ in the proper language are called Demanu ⁽⁵⁰³⁾. They are dreamers who allege that the Gods appear to them occasionally in dreams and order them to make such and such offerings which they do from their own means. The people assemble to eat the sacrifice and contribute drink and grain. The Erebu makes the offering both he and the Demanu pray. In each village is one Demanu, sometimes two. They are much respected. The custom seems to be universal.

(499) Not named on the S.S.

(500) Balla.

(501) The hills are unfortunately not marked on the S.S. (1925 edn.)

(502) In the MS. Buchanan had half deleted the *y* in this word evidently intending to correct the spelling. Above he has called these people Dewaal. See note (180).

(503) Mr. Bainbridge spells this word *dewano* and from his *Memoir* (*Memo. JASSB* Vol. II No. 4) it seems that the functions of the *dewano* are those of a diviner or soothsayer and perhaps more than this as their presence appears to be essential at most ceremonies and sacrifices. The functions of the Erebu or *erwu* have not been explained. It would seem that he is the officiating priest. It is to be hoped, however that fuller research will be carried out on scientific lines into the social and religious customs and rites of this interesting people before it is too late.

The sick apply to the Demanus, and give them presents for their assistance with mental prayer. This is called Jupe ⁽⁵⁰⁴⁾. The Not Pahariyas that I saw at Mahjuya said that they are the same with the Bhuiyas, and that they eat and intermarry with the Moler, but the latter here is denied. Many of the men speak the Moler language, but the women use the Hindi. They no doubt eat beef. They have chiefs called Majhis. They are very numerous in Monihari, Barkop, Parsunda and Goda. In the last I did not hear of them, because, I believe, they are there called Beor Bhuiyas. Here the people are totally ignorant of that name. They plough. At Manjhuya the hill people and Not Pahariyas agreed that the two tribes eat together and intermarry ⁽⁵⁰⁵⁾.

24th January — Being detained by rain, I went to visit the hill to the west named Kariswarika tok ⁽⁵⁰⁶⁾. In the evening some stones of a very slaggy appearance had been brought from it, which together with its shape made me anxious to examine it. I proceeded along level ground for about a mile and a half, when I came near its highest peak, towards which I ascended for some way by a gentle acclivity, containing calcareous nodules (Gangot), among which were some small fragments of unripe Khorī, become entirely white. Above this in ascending towards the peak, the ground became stony. The stones had mostly much of a slaggy appearance. Among these detached masses were however many white fragments of imperfect Khorī, and

(504) i.e. *gap* (Sans.), muttering or repeating prayers.

(505) Note the connexion which Buchanan here indicates as existing between the Maler, the Nat Pahārīās and the Bhuiyās. While at Majhuā, in the midst of the Samiā area, it was admitted that the latter two tribes were originally the same people, and also that the Nat Pahārīās intermarried and ate with the Maler, but when Buchanan reached Pātsundā, which lies outside the hill area proper, and where external influences had long been at work, he finds that consanguinity with the mountaineers is no longer admitted. This process of fission, observable in the case of many races, has developed further since Buchanan's time, and his record is all the more valuable on this account.

(506) Not marked on the S.S., but there is a hamlet, Kāndesvārī (*sic*) Kita shown about 3 mi. W. by S. from Mahāgama, which is suggestive of Buchanan's name. *Thok*, or *thok*, means a 'lump' or 'mass', and so, as here, a 'knoll'. *Thok* also means a 'holding' or 'tenure'. But it is possible that 'tok' is a slip of the pen for 'tek' (*tek*). See note (422) above.

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⁽⁴⁹⁹⁾ Not named on the S.S.

⁽⁵⁰⁰⁾ Ballia.

⁽⁵⁰¹⁾ The hills are unfortunately not marked on the S.S. (1925 edn.)

⁽⁵⁰²⁾ In the MS Buchanan had half deleted the *y* in this word evidently intending to correct the spelling. Above he has called these people Dewasi. See note (180).

⁽⁵⁰³⁾ Mr Bainbridge spells this word *demno* and from his *Memoir* (Mem. JASB Vol. II No. 4) it seems that the functions of the *demno* are those of a diviner or soothsayer and perhaps more than this, as their presence appears to be essential at most ceremonies and sacrifices. The functions of the Erebu or *ejwu* have not been explained: it would seem that he is the officiating priest. It is to be hoped, however that fuller research will be carried out on scientific lines into the social and religious customs and rites of this interesting people before it is too late.

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⁽⁵⁰⁴⁾ i.e. *jaṇ* (Sans.), muttering or repeating prayers.

⁽⁵⁰⁵⁾ Note the connexion which Buchanan here indicates as existing between the Maler, the Nāt Pahārīās and the Bhuiyās. While at Majhuā, in the midst of the Sauriā area, it was admitted that the latter two tribes were originally the same people, and also that the Nāt Pahārīās intermarried and ate with the Maler, but when Buchanan reached Pātsundā, which lies outside the hill area proper, and where external influences had long been at work, he finds that consanguinity with the mountaineers is no longer admitted. This process of fission, observable in the case of many races, has developed further since Buchanan's time, and his record is all the more valuable on this account.

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some that retained a very high degree of hardness, and consisted of different coloured parallel zones, on one of which I perceived the impression of a moss. On coming to where the ascent became very steep, the number of loose stones increased, but the Khorī was little if at all observable. The stones in general retained a slaggy appearance. Everything in confusion without any approach to regular disposition. The largest mass and what seemed to me to be a part of the solid rock, had every appearance of having undergone the action of fire. Adjacent to this was a detached mass of very great hardness, with little of the slaggy appearance, but very curiously intermixed of [sic] black flinty like portions and a horn-coloured substance of a fine earthy fracture. Ascending the hill considerably I came to a portion consisting of a rotten sandstone, sometimes disposed in parallel flakes, sometimes most singularly eroded, and sometimes having very much the appearance of a decaying granite. In general it is found only in masses, but some were so large that they were perhaps part of a solid rock. Above this to the very summit of the peak the stone is very hard and of a reddish colour, more or less intense. It has an earthy fracture but contains, imbedded in it many small masses of felspar in general red but sometimes white. Until I reached the summit these stones were only in detached masses, but on reaching the top, I perceived a circular cavity, sinking down to a great depth and only surrounded by a narrow ledge of hills, of various heights in different places and the descent exceedingly steep, especially towards the higher parts of the ledge where the naked perpendicular rock of this red stone occupied considerable spaces but without any appearance of stratification. From the summit owing partly to the rain and haziness of the weather, and partly to the trees and grass which was higher than my head I had little or no view of the country. On descending to the bottom of the cavity which from edge to edge of the ledge of hills may be four hundred yards in diameter I found the same succession of stony matters as without, but,

after I reached below the highest parts of the ledge, all was in confused broken masses. The white decayed Khori extended higher than on the outside. Some of it had become very soft, while other portions retained a great degree of hardness. At the bottom I found a small channel that conveys the rain water from this cavity through a gap in the northern side of the ledge, by which it is surrounded. The steep banks of this watercourse consist of various small masses of all the above-mentioned matters thickly imbedded in a soil that has much the appearance of dark ashes. Among these is a good deal of the red softish stone called Gheru mati by the natives, and also some dark red harder masses containing black concretions. The gap by which the rivulet passes out through the ledge of hills, may be thirty yards wide, and has a very gentle declivity to the plain. It is strewed with stones, which appear to me most evidently to have undergone the action of fire. Here are lying a few small fragments of white fat quartz, a substance very rare in these eastern hills, so far as I have seen. Here, however, the flinty diaphanous nodules are very rare, and I saw none that had any crystals. On the whole, I have never seen any place that seems to agree better with the descriptions of the craters of extinguished volcanoes⁽⁵⁰⁷⁾ than this cavity in Khoriswarika tok.

The watercourse which comes from the cavity, on entering the plain, from the gap, has on its east side a granular rotten rock very like conglutinated ashes, and contains small fragments of white quartz. On the west side of the rivulet is an extensive space, in which the rock of imperfect white Khori comes in many parts to the surface. In neither of these rocks is there any appearance of regular stratification. A little farther west is the place, from whence I began

(507) W S Sherwill, whose knowledge of geology was also considerable, visited this neighbourhood in 1851, and writes of the Gandeśwari (sc Kāndeśvarī) hills as terminating in "several peaks of sandstone and ironstone curiously jumbled together, which gave Dr Buchanan the idea of the spot having been a volcano. The rocks are a heavy ferruginous red sandstone" (*General Remarks*, p 50). He does not, however, appear to have examined the crater = like cavity described so fully by Buchanan,

the ascent A low ridge of hills extends a considerable way to the east from Khoriswarika Tok, and another comes from the north at right angles towards that, but does not join it Beyond that, towards the high hills that are inhabited is some plain land occupied by Ghatwals

The Sezawul's nephew says that about five years ago he heard that a smoke issued from a hill named Chupur Beta⁽⁵⁰⁸⁾ about seven cosses south-east from Korariya He visited the place The space was not hollow and consisted of earth and stones mixed It was not red hot but a thin smoke issued continually from a space about eight or ten cubits square He heard that in the night it was luminous, but he did not see it then Upon throwing wood upon the hot place it took fire in a few minutes In fact this seems to have been like the hot place which I saw but there being no water the heat became more considerable It continued in this state for three years and then stopped

The paharias of Modubon⁽⁵⁰⁹⁾ say that their crops are as follows *First* Mukayi sown in Asar if Desi the fruit is gathered in Badur if Pahari it is gathered in Aghron Maize in their language is called Tekalo both kinds are sown mixed *Second* Jonera is called Naitu It is the same with the Gohama Jonera⁽⁵¹⁰⁾ of the plains Sown along with the maize gathered in Paus *Fourth* Two kinds of Meruya⁽⁵¹¹⁾ Pahariya gathered in Aghron and Desila⁽⁵¹²⁾ gathered in Badur they call them Kodome *Fifth* Kaungni⁽⁵¹³⁾ called by them Petaga is gathered in Badur *Sixth*

(508) Chuparbhita (coalfield) (S.S.)

(509) Madhuban

(510) *Gaḍḍa* vulg. *gaḍḍa* is wheat; *gaḍḍa jānerā* i.e. wheat-like *jānerā* is a name for the Great Millet generally known as *ṛḍr jāṅkari* etc. The exclusive name for Indian Corn or maize in South Bihār is *maḍḍi*, that for the Great Millet is *ṛḍr* The name *jānerā* though generally applied to the millet is also frequently used of maize hence some confusion arises and hence the expression *gaḍḍa jānerā*, to make it clear that the millet is meant

(511) *Maṛḍa* (*Blacusina coracana*) the Bāgi of South India.

(512) i.e. *desi* of the (plains) country as distinguished from the hills

(513) *Kāṅni* (*Setaria italica*) the Italian millet.

Cytisus Cajan⁽⁵¹⁴⁾, called by them Mallahari, is gathered in Paus and Mag, another kind, called Gol Lahari, is gathered in Choyet *Third Bora*,⁽⁵¹⁵⁾ called Kusora, gathered in Agron. All these are sown together, in proportion greater as above-mentioned. Their smallest crop is cotton, and it is sown by itself, when two crops have been taken from the land. A few plantains at the bottoms of the hills. They eat few vegetables. From two to ten people in each house. Rich men occasionally hire people to sow and reap. They do not hoe, but make holes with a sharp stick, between the stones, two or three fingers deep, and put in each ten or twelve seeds taken from a promiscuous mixture. They only work from morning until noon, and get two paisas, or the value in maize. In harvest they work all day, and will gather from forty to sixty baskets of ears, each of which will give three sers of grain (104 S W). They get one for their labour. It is the women who reap and sow most. The men hunt, clear the fields, and cut timber and charcoal.

25th January — Detained by rain. The Parsonda rajah, as he is called, is now absent at Bhagalpur. His house consists of some mud buildings, one or two of which have two storeys. It is surrounded by the huts of his tenantry forming a pretty large village, but it has neither shops nor market. Although commonly called Parsunda, its proper name is ⁽⁵¹⁶⁾ The situation very fine, there being much rice land near it, with swelling ground of a very rich soil for the village.

26th January — I went about $9\frac{1}{2}$ miles to Barkop⁽⁵¹⁷⁾. I intended to visit the two small hills⁽⁵¹⁸⁾ south from the village, and was told that the road passed by them, but I left them far to the east.

(514) Now known as *Cajanus indicus*, the Pigeon pea, which Buchanan generally calls "orrhor" (i.e. arhar).

(515) Buchanan appears to mean here, as elsewhere, by *borā* the Cow pea or Cow gram (*Vigna Catjang*), called *borā*, *barbatī*, *lobīā*, etc. The trouble is, that this pulse is not usually harvested in Aghan.

(516) Left blank in the MS. See note (493) above.

(517) **Barkup.**

(518) Not marked on the S.S.

I have little doubt but that they are granitic, a larger naked rock occupying the summit of the larger Not quite three miles on, I came to Durgapur ⁽⁵¹⁹⁾ where the Rajahs formerly dwelt. It is now totally deserted, except one small field of mustard seed. I then passed two Ghats but they were at a little distance, and the whole country adjacent to the road is deserted to the Sundor ⁽⁵²⁰⁾ river. This is a wide deep channel, with a sandy bottom and a small clear stream and separates Parsunda from Barkop, from which place it is about three miles distant. Between the river and Barkop I passed through a Ghatwal village, with a good deal of cultivation. About $2\frac{1}{2}$ miles from the Sundar I passed a dry channel named the Sapin ⁽⁵²¹⁾. From thence to my tent at Barkop was among the rugged peaks of that place. These peaks consist of a fine large-grained granite reddish felspar white quartz and much black micaceous matter. One of them is excessively steep and on its summit is supposed to contain an image of Jugni ⁽⁵²²⁾ but no person has ascended to see. At the bottom is a small temple of the same deity represented by a Linga shaped stone. The Pujari is of the impure tribe ⁽⁵²³⁾. The Rajah in the evening made me a visit. He is very near as bad as Gujeraj Singh and seems to be in the hands of sharks. The interpreter tribe is here called Desi Moler ⁽⁵²⁴⁾ and Desi Bhuiyas and are acknowledged to be the same with the Bher Bhuiyas of Kurariya but say they are different from the Not Pahariyas of Moni hari. Their customs however are the same. Many of them speak the Muler language and they eat and can intermarry with the Muler of the hills. They of course eat beef. The hill people of Parsunda, and the Not

(519) Durgapur

(520) Sundar N.

(521) Sapin N.

(522) Probably Yogini (female devotee)

(523) Left blank in the MS.

(524) This record is of special importance. We have a people calling themselves Desi Moler (i.e. Moler of the plains country) admittedly closely connected with the local Bhuiyās and Bher (or Beher) Bhuiyās of Karharā. And here we find Bhuiyās still speaking the Moler or Malto language.

Pahariyas or Desi Muler there both acknowledge that they eat in common and might intermarry

Barkop is in a very fine situation. A beautiful rich plain surrounded by seven rocks covered with wood. The zemindar's house is like that of his kinsman at Parsunda.

27th January —I went to Buriya,⁽⁵²⁵⁾ taking as straight a direction as possible, without minding a road. For almost nine miles the way led through woods with scattered villages; but all the woods seem formerly to have been occupied. For the next six miles the country was quite clear, but the greater part waste, although it once has been cultivated. The boundary of Barkop is about three miles from Buriya. Between the boundary and Buriya are two small rivers ⁽⁵²⁶⁾ I passed two male antelopes. Each had some females, and one of them some young under his protection. The males differed from that brought at Badalgunj, which was called Bareta ⁽⁵²⁷⁾ This, called Goraiya, has much longer horns, and is much darker in colour. Both bound in the same manner. Puriya is a pretty large village, but its houses poor. Its zemindar, of an old scribe family, resides. He is a plain unaffected man, but has nothing about him like a man of any rank. The country was, he says, depopulated by the famine, and hill people. He thinks that within these ten or twelve years it has begun to recover.

28th January —I went to Thanah Kodoyar,⁽⁵²⁸⁾ almost twelve miles, but called five coses. The country very bare, most of the trees being palmiras, which convey little appearance of shelter. No bamboos on

⁽⁵²⁵⁾ **Bhurla**, 14 mi. S by W of Colgong

⁽⁵²⁶⁾ Both named **Gerua N.** on the S S

⁽⁵²⁷⁾ A name used in south Bhāgalpur for the Indian Antelope, or "Black Buck" (*Antelope cervicapra*). Goraiya really means 'of fair hue' (from *gorā*) the term is sometimes applied to the doe, but not to the buck.

⁽⁵²⁸⁾ **Kodwar**, the headquarters of a *thānā* or police "division" in Buchanan's time. The actual site has, it seems, been diluviated, but the name survives in that of a village called **Ramnagar Arazī Shankarpur-kodwar** on the S S, on the south bank of the **Margang N.**, which represents an old channel of the Ganges, about 6 mi. W by S from Colgong.

this side of Tiliyaghorī. The houses close huddled and very poor. For 6½ miles almost all waste, short grass abounding with antelopes. They go in families of from three to seven. Usually one adult male with several females and their young. I only saw one herd in which there were two males, but I saw two males quite by themselves. It is probable that in rutting season they fight until one is either killed or banished. The small numbers of males in proportion to females renders it probable, that the former event frequently happens. They are far from being swift, and their bounding is awkward. These antelopes were of the same kind that I saw yesterday, but to-day they are called Borata Boratī (529). The last part finely cultivated. All swelling land. About a quarter of a mile from Buriya I crossed a small river with a little stream called Gairan (530).

29th January — I went in a boat (531) to Kahalgang in order to examine the three rocks, which are surrounded by the river. By the way I noticed calcareous nodules in some parts of the bank where the land is low. The rocks are of fine granite, black mica, white quartz and large masses of white or pale red felspar. Masses very large and irregular. Some have been split by wedges. Many wild pigeons frequent these rocks. On my way back by land I observed a large mass of granite projecting from the soil a little south from the road at the 16 milestone from Bhagalpur. It is one of the lowest parts of the country, and is a solid rock of considerable size.

2nd February — I went to Bhagalpur by a road already travelled (532). The whole [of the] natives there are so deeply engaged in the celebration of the Muhurem, that no business was practicable. The Hindus seem fully as much engaged as the Moslems.

(529) See note (527) above. Baratī and Baratī (feminine form used of the doe).

(530) Cahira M.

(531) Buchanan must have gone down the old channel the main channel is now 3 or 4 mi. north of the site of the old Kodwār tādā.

(532) On the 28th and 29th October (*supra*).

4th February — I crossed the Ganges at Naia-ghat,⁽⁵³³⁾ where at this season it is about half a mile in width. The water comes close to the hills of Bhagalpur, which consist of red clay mixed with calcareous nodules. The ghat is just below the mouth of the Jomuni,⁽⁵³⁴⁾ which since last year has been navigable throughout the dry season. The pure sand on the north side of the river is about half a mile wide. From its side there is a space of new land, more than three miles wide to Sibgunj⁽⁵³⁵⁾ occupied by villages, but very bare. From Sibgunj to Bihipur,⁽⁵³⁵⁾ the Thana, is about five miles, by the side of an old water-course, which contains a good deal of water. The country to the right is finely wooded, beyond the water-course is bare, but well cultivated. The road very good. From the sands of the river the boundary of Kotwali extends about $1\frac{1}{2}$ mile towards Sibganj.

5th February — Visited by the zemindar of the Chor⁽⁵³⁶⁾ towards the west, a good-looking man of the Kurwar⁽⁵³⁷⁾ caste, and of an old family. His people say that the tribe is very numerous all the way from this to Gaur near the river, but that they originally came from Chota Nagpur, where they, the Khyetauris,

(533) Not marked on the S S

(534) Jamunia N.

(535) Sivaganj and Bihipur.

(536) *Char* (from a root meaning to 'move') is an island of alluvium deposited by a river, generally of a shifting character, owing to the changes in the course of the main current.

(537) Kharwār, Khairwār or Kherwār. The tradition is very interesting. The Kharwārs ranged over a wide area at one time. The name is found as Khayaravāla in an old (undated) inscription on the Rohtāsgarh plateau which seems to point to its having been a professional title originally, meaning the people who dealt in *khayara*, mod. Hindī *khair* (*Acacia Catechu*), the tree that furnishes the astringent extract known as *kath* or 'Cutch', besides a gum and valuable timber. But there is also the possibility that the name is derived from that of the place (Khairā) they originally came from.

The name Kherwārī has been assigned in the *Linguistic Survey of India* to denote the principal language of the Mundā Branch of the Austro-Asiatic Sub-Family, with its several dialects, namely, Sontālī, Mundārī, Ho, Bhumij, Korwā, Asurī, Kodā Tūrī, etc.

and the Dangor⁽⁵³⁸⁾ (who work at Paingtū) are the prevailing castes. In their original country they have a peculiar language, but those here have forgotten it and speak the Hindi.

9th February — Bihpur is a very large irregular village finely situated. It has four akaras⁽⁵³⁹⁾ and each has some buildings of brick. The agents of the zemindars vastly superior to those of the other side. I went to Phulout⁽⁵⁴⁰⁾. The first four miles to the Tiljugi⁽⁵⁴¹⁾ a very beautiful country, with innumerable plantations. The Tiljugi a very wide channel, with a small clear stream. From thence to the Gagri⁽⁵⁴²⁾ is about 2½ miles. The Gagri is a very large channel and contains much deep water almost stagnant perhaps one hundred and fifty yards wide. Many stagnant pools in other parts of the channel communicate with the main stream and seem to abound in fish. From the Gagri to Phulout is about two miles. The whole country near the Gagri is bare and dismal, a few scattered fields amidst a waste of coarse grass. It is deeply inundated but the soil seems tolerable. Phulout is a pretty considerable village, partly belonging to the invalids and partly to the zemindar. As no new invalids have been sent for twenty years, most of them have died out. They and their widows cultivate very little. Some keep shops or trade and live by their pension. The village of course is on the decay.

10th February — I went about five miles through a very dismal country to Alumnagar⁽⁵⁴³⁾ a considerable

(538) Dhāṅgar (see Risley *T. & C. I.* 219 Buchanan's *Śāḍāṅḍar Journal* p. 55, n. 4). The name probably means Hill man. Many suggestions have been made as to the derivation of this name. I have the untenable one, that they received the bulk of their (paddy). The original name was probably *dāṅgara*, from *dāṅga* also *dāṅga* (Hin.) a hill meaning hill folk and *gar* rude folk. *gar* also rough.

(539) *ākāra* (Hin.) literally a place of assemblage wrestling or games; also used of a monastery or place mendicants live.

(540) Phulaut.

(541) Tiljugi M.

(542) Chaghri M.

(543) Alumnagar.

main a place for where religious

village, where the Rajah of Choy⁽⁵⁴⁴⁾ resides. He is a civil young man, of tolerable understanding, and he and his two younger brothers are keen sportsmen, on which account they prefer this wild country to the beautiful lands near the Ganges, although these are more healthy. His house is mean, consisting of a number of mud huts, and a small chapel of brick, surrounded by a ruinous mud wall. Part was burned last year, and the family is too poor to rebuild, having last year also been deeply involved by the funeral of his father. He has a flower garden and orangery, but the latter does not thrive, and the fruit is wretched. In the garden is a stunted tree of the *Pinus longifolia*.⁽⁵⁴⁵⁾

11th February —I went about 12½ miles to Mahinathnagar,⁽⁵⁴⁶⁾ through a low country filled with swamps. Many villages and plantations, but little cultivation. I presume that the people live much by their cattle. Mynathnagar is in Furkiya, and not in Choy as represented by Rennell, the river forming the boundary. The Rajah says that his boundary with Tirahut is seven or eight coses north from Alemnagar, and that towards the north and east his district is well cultivated. The Katnaya⁽⁵⁴⁷⁾ is a pretty considerable stream, deep clear and rapid, but full of weeds, as it passes through a marsh. The huts mostly mud. People very poor and dirty, but tolerably clothed, as in Puraniya. About a mile from Alemnagar passed a market place named Ladangwa,⁽⁵⁴⁸⁾ held under a tree near a village.

Mahinathnagar is a poor naked village, opposite to an invalid Thanah established twelve years ago. The invalids are quite tired of their situation, cannot

(544) Chhai pargana, named as a mahal of sarkār Munger in Todar Mal's roll. See also J. Beames *On the Geography of India in the Reign of Akbar* JASB, 1885, p. 170, 172, and map facing p. 182.

(545) This is the *chir* or *chil* the long-leaved pine, not found on the plains of Bihār.

(546) Mahinath Nagar. See Rennell, B 4, Pl. II. It lies just within pargana Pharkiyā.

(547) Kadai N.

(548) Ladma.

procure people to cultivate their grounds, and are desirous of retiring on their pensions to some more healthy and agreeable place. I was here informed by two Burkandaj belonging to Gogri,⁽⁵⁴⁹⁾ that to that Thanah the direct distance is eleven coses, but that to Chautum,⁽⁵⁵⁰⁾ six coses, the road was impracticable owing to marshes. I was directed to proceed to Simri,⁽⁵⁵¹⁾ six coses, Chautum five coses, and Gogri four

12th February — I went to Simri, which is at least thirteen miles from Mahinathnagar. About three miles from Mahinath I came to an old watercourse of considerable width and containing much water, but overgrown with weeds. It is called Tilawī,⁽⁵⁵²⁾ and is said to be navigable in the rainy season. It forms the boundary with Tirahut. I followed its course for about $1\frac{1}{2}$ mile to Sugowa⁽⁵⁵³⁾ village which must be the Sogniah of Rennell. Until within about half a mile of this place the country is low and bare of trees. It then continues high to Simli or Simree, and is well wooded in plantations of mangoes, palmiras, and a few bamboos, but the villages are quite bare, the houses close huddled together, and very miserable. The people very dirty as usual in Mithila⁽⁵⁵⁴⁾. Simri is a poor village surrounded by fine groves. Visited by two Muhammadan zemindars formerly Melek,⁽⁵⁵⁵⁾ very civil men and not without sense. They said that the cultivation has diminished considerably since the perpetual settlement. China⁽⁵⁵⁶⁾ is raised everywhere

(549) Gogri

(550) Chautham

(551) Simri near Bakhtiarpur, a very roundabout route!

(552) Tilabeh M.

(553) Sugma. The Sogniah of Rennell.

(554) Mithilā. The ancient name of the country north of the Ganges and south of the Himālaya, extending roughly from the Gogri on the west to the Koel on the east was Videha. Mithilā was the capital city of Videha, as we learn from the Buddhist Jātakas and the Epics. The name Mithilā was later applied to the country afterwards, and more restricted in area to be known as Tirabhukti from which we get the name Tirhut. Tirhut was a *sarkār* of *śūbā* Bihār in Akbar's time and until 1875 a district under the British administration. For extent see A. Wyatt's Revenue Survey (1845-48) map.

(555) For an account of the Chandhuri family still established there see *Gazetteer* (1909) p. 192-93.

(556) China, the Common Millet *Panicum millaceum*.

being considered necessary at both marriages and funerals Higher priced grains are used on these occasions

13th February —Went sixteen miles to Chautom, about south-east The Gai⁽⁵⁵⁷⁾ rivulet now stagnant seems to inundate a wide country, which by the spiritless natives is on that account considered as nearly useless It is about nine miles from Simri, and two from the Tiljuga,⁽⁵⁵⁸⁾ down the left bank of which I proceeded to the Ghat, and crossed to Chautom standing on its south side Its banks on both sides are high, and have been formerly cultivated The houses to-day uncommonly wretched Two men followed me a mile bawling out for justice against the zemindars

Chautom is a small village on the south side of the Tiljugi, which is the same river with the Gagri and Kamala ⁽⁵⁵⁸⁾ It is a considerable river navigable at this season, but is not wide, and its banks on both sides are high and steep It cannot, therefore, be a violent torrent that sweeps away much of the soil, as the people pretend I saw in it two Goriyals,⁽⁵⁵⁹⁾ and it abounds in fish Monawar Sing, his brother and nephew reside at Chautom, near the centre of their estate,⁽⁵⁶⁰⁾ which, they say, extends about seven coses in diameter each way Their houses are very miserable, and everything about them bespeaks their being in poverty They told me that they paid nineteen hundred Rupees a year, and that by far the greater part of their land is waste That Mr Cleveland⁽⁵⁶¹⁾ and afterwards Mr Hay, an Indigo planter, had brought some of their land into cultivation, otherwise the whole would have been in that condition, as they

(557) Not named on the S S

(558) It is known as the Ghaghri in its lower reaches, and as the Tiljugā and Kamlā higher up Its channels and names are equally variable

(559) The Gangetic alligator, or *ghariyāl* (*Gavialis Gangeticus*); but the freshwater crocodile, or *boch* (*Crocodilus palustris*) is also fairly common in the rivers of these parts

(560) For a short account of this family, see *Gazetteer* (1926 edn, p 208)

(561) For this spelling of the name, that used by Cleveland himself in his Writer's Petition, see Appendix 1

were exceedingly poor, and could not advance stock without which no one would commence cultivation, although they offered the land for one or two annas a bigah. They also said that they were only enabled to pay their revenue and prevent their lands from being sold, by money lent them by an Indigo planter, yet they spoke so very inconsiderately, that at first they joined in the usual cry against that class of people, although they changed their tune when they were asked why they were displeased at receiving money to keep their lands from being sold. In fact I do not believe that the planter assists them to any considerable extent as I saw very little plant on their lands and it is at too great a distance from his works. The assertion was made to raise my commiseration for their poverty yet they wished to entertain my whole people and Manawar attempted to fall at my feet in order to obtain permission when I declined the offer. They have also made large and useless plantations of mangoes and I suspect the fact is that they lavish their whole means on such useless pieces of ostentation and cannot spare a cowrie for the improvement of their estate while they vex every tenant that has any stock until he runs away for many tenants have gone to Choyi ⁽⁵⁶²⁾ where they pay above a rupee a biga on an average. When I exhorted them to economy for a few years and to lay out their savings on the cultivation of their land they said that the whole was so deeply inundated that nothing would grow on it except a winter crop, which was not worth the taking the soil was so poor. Now both these assertions are without foundation. I do not think from what I have seen in travelling from north to south the whole length that half is inundated and all that is so will give annually a crop of wheat mustard or pulse. The remainder is sufficiently high to give a summer and winter crop. In a few parts that have been cultivated, the crops are uncommonly rich especially the orohor and mustard. The real cause of the misery of both them and their people is

(562) i.e. into the Chhal pargana or across the boundary into the Bhāgalpur district.

the lowness of taxes ⁽⁵⁶³⁾ The soil in almost every part, rich dark ash-coloured clay, not very stiff.

14th February —I went five coses to Thana Gogri, near which I passed through a village of Invalids, the whole of whose lands was cultivated. A village had been attempted near Chautom, but entirely failed. I presume no cultivator could be procured, where the zemindar let his lands so low.

The invalids from the neighbouring Thanahs came to visit me. They are very much satisfied with their condition, receive their allowances regularly, once in the six months, at their own houses, and an officer visits them every year to receive their complaints. Most of their lands here are in cultivation. Those from Chautom say that they deserted it because the country swarmed with mosquitoes, and the river with alligators, Boach ⁽⁵⁶⁴⁾ They also complained of the inundation.

16th February —I went to visit the Dira ⁽⁵⁶⁵⁾ adjacent to the Thanah, which is undoubtedly entirely inundated, but it is tolerably cultivated and populous, although not a single tree will live on it, owing to the depth of the floods. It seems to be newly taken in by Dular Chawduri. The Dira between it and the Ganges is disputed property, and mostly waste. Gogri is a very large village extending at least two-thirds of a mile from north to south, but not close built. It is hid in a grove of trees, as the villages of Bengal usually are. I have nowhere seen the ricinus ⁽⁵⁶⁶⁾ so luxuriant. Besides mangoes and Jacks, many tal and Kejhur, ⁽⁵⁶⁷⁾ and a few bamboos. The

⁽⁵⁶³⁾ Buchanan elsewhere also refers to low rents as inducive to neglect of cultivation, and there is undoubtedly force in the contention. Buchanan, however saw this area in the dry season. In the rains most of it is deeply flooded, so that the cultivation of *aghani* crops is not practicable.

⁽⁵⁶⁴⁾ *Boch*, the 'snub nosed', fresh-water crocodile [see note ⁽⁵⁵⁹⁾ above]

⁽⁵⁶⁵⁾ *Diārā*, an area of alluvial deposit formed by a river

⁽⁵⁶⁶⁾ *Ricinus communis*, the castor oil plant

⁽⁵⁶⁷⁾ *Tār* (*Borassus flabellifer*), the palmyra or "toddy" palm, *kajūr* (*Phoenix sylvestris*), the date palm

old mosque in its middle, built by Alawadin,⁽⁵⁶⁸⁾ the son of Husseyn Shah, has not been large but very neat, being entirely built of cut bricks neatly carved. Two bands of a singular stone, reddish waved with white, give it solidity. The east front had fallen, and has been rebuilt with the common coarse brick. The inscription is in this part. The roof has now fallen. A small neat mosque in complete repair a little south from it. The people here uncommonly stupid, and there are immense swarms of beggars, especially of blind people. The Daroga, a Bengalese, is of considerable understanding.

19th February—I went to Kummargunj⁽⁵⁶⁹⁾ About two miles from the Thanah I came to an old sandy channel of the Ganges very wide but in most places dry, and not at all navigable in this season. I followed its banks for about 2½ miles, when I came to a large branch of the river navigable at all seasons and where a good many boats seven or eight (7 or 8) were lying, taking in a cargo of reeds grass, and firewood. The chor beyond both channels seems to be about half cultivated but quite bare of trees. I followed the bank of this branch for about three miles when I came opposite to the mouth of another arm which separates this Thanah of Gogri from that of Monggir. The chor belonging to Monggir seems mostly waste, and is not large. I then went down the bank of this, the chief branch of the Ganges for about 1½ mile, when I turned to the left and went through fields, mostly belonging to Korokpur⁽⁵⁷⁰⁾ for rather more than five miles when I came to the side of the Ganges opposite to Kumargunj. The river may be there about fourteen hundred yards wide of which the half on the north side at this season, is mere sand. The southern shore high red clay. No islands.

⁽⁵⁶⁸⁾ Probably Allā d dīn a son in law (not son) of Husain Shāh. See *Riyāz's salātin* Bibl. In. Series, trans. by Abdu's salām p. 134. The mosque and inscription are not mentioned in the *Gazetteer*.

⁽⁵⁶⁹⁾ Kummargunj 1 mi. W. of Jahāngīrā.

⁽⁵⁷⁰⁾ Most of the large Bindā dīārā was included within the Kharakpur pargana which indicates that from very early times the main stream of the Ganges flowed by the northern channel as it did in 1766-67 and as it has often done since.

21st February —I went about $2\frac{1}{2}$ miles to see the two hills⁽⁵⁷¹⁾ at Sultanganj I first passed almost a mile through the village of Kumargunj, chiefly occupied by Invalids, shopkeepers and retailers of Tari, who live by supplying passengers Immense numbers of pilgrims flocking to and from Bhaidyonath⁽⁵⁷²⁾ Many have brought water from Prag,⁽⁵⁷³⁾ others take it from Utor Bahini⁽⁵⁷⁴⁾ At the end of the town three or four most wretched huts belonging to a kind of Goalas from Katak, who play with snakes, and dance to a kind of bagpipe They also pretend to be struck stupid, and their pipe to be rendered mute by anything thrown at them, one of the most silly pieces of grimace that I have seen Near Sultanganj is an

(571) Bishop Heber (*Narrative*, I, 289) writes "We passed at Janghera two pretty rocks projecting into the river, with a mosque on the one, and a pagoda on the other" These, as will be seen from what follows, are Buchanan's "two hills", the one on the mainland, surmounted by a mosque, the other forming the rocky island in the river Neither is marked on the S S

(572) The temple of Vaidyanātha at Deoghar

(573) Prayāg, modern Allāhābād The Sanskrit word *prayāga* meant a 'sacrifice', then a place of sacrifice and of pilgrimage The tradition is that the sacred Sarasvatī also joined the Ganges and Yamunā where they meet at Allahabad, and it is thought that the Sarasvatī still joins them there underground, thus forming a *triveni*, or junction of 'three streams'—always a holy site This was the *prayāga par excellence* The term *prayāg* is now applied, on the analogy of the junction of the Ganges and Yamunā, to other confluences of two rivers

(574) i.e. *uttar-bahini*, 'north flowing' The reference is to the Ganges near the Jahāngīrā rock, where the river used to curve round, deflected by the rock there, towards the north, or rather north-east The river has cut in since round the south of the rock-island, and the main channel here now flows more or less from west to east, but indications of the old northerly trend of the stream may be seen in the many deserted channels to the north of the present river, e.g., that which passes Udaipur (8 mi NE by N of Jahāngīrā) and Mathurāpur (8½ mi NNE of Sultanganj) In fact, in John Marshall's time (1670) the Ganges appear to have followed this very channel, as he passed Gaura, a place which lay between Udaipur and Mathurāpur, but has since been diluviated, on his trip up the river to Patna in that year It must be noted, however, that the Ganges had already cut in round the rock island at Jahāngīrā, as de Graaf (in the same year) describes the island and refers to the violence of the current in the passage between it and the mainland (*la Pointe de Jangira*), owing to which "many boats had capsized" there

old fort of Korno Rajah,⁽⁵⁷⁵⁾ a square like that at Bhagalpur, but not near so large, being scarcely more than four or five acres. No cavity within, nor any traces of a ditch. In one place a small part of the outer facing of brick remains. The whole filled with bricks and fragments. Sultanganj is a large village with some trade. I saw many small timbers and bamboos lying for exportation. The two hills are very curious, both consist of a fine granite, reddish felspar little white quartz much black mica. The one in the river is called the Fakir's rock⁽⁵⁷⁶⁾. It is not so large as any of the three at Kahalgong and a very large proportion is occupied by the buildings of a Mahant of the Dasnami Sannyasis, which are in good repair but it is the most mis-shapen rude incipient mass that I have ever seen. The Mahant acknowledges no Superior nor Guru. He says that he is the ninth or tenth in succession, and that he was born a Brahman in Gorokpur⁽⁵⁷⁷⁾. He has about 20 Chelas, and the community have five or six servants. Owing to the rapidity of the current in the floods they have then little or no communication with the shore but at other seasons almost every Hindu of any sort of note, who passes up or down makes offerings and at the Mela they receive great abundance so that they lay in ample stores. They are very poor looking creatures and appear to live a life of listless mortification. The Guru fairly said that they had no knowledge

⁽⁵⁷⁵⁾ Now known as Karangah, the fort of Raja Karpa. The site should not be confounded with that described in detail by Rajendralala Mitra in *JASB* Vol. 33 (1864) p. 360 f. In his Report (see *Martin's B I* II 380) Buchanan writes: "Some traces of the brick wall by which the outer side was faced are still observable and it is said a good deal remained pretty entire until it was pulled down by Colonel Hutchinson to erect a set of indigo works. Some of the indigo vats were still in situ 18 years ago when I saw them, and they are perhaps still to be seen. In the *Bengal Obituary* (Holmes & Co. 1848) the inscription on a monument at Sultanganj factory is quoted — 'To the memory of John Hutchinson Esqr who departed this life on the 12th September 1820 aged 58 years 40 of which were spent at this factory so that he must have been manufacturing indigo at Sultanganj while Col. Hutchinson was *Regulating Officer of the Jāgirdār Institution* (see Appendix 32, and was if not a son possibly a brother of the Colonel."

⁽⁵⁷⁶⁾ i.e. the rocky island, but Fakir's rock is a misnomer as the site is Hindū. For description see *ASI* Vol. XV pp. 21-24 and Plates VII-XI.

⁽⁵⁷⁷⁾ Gorakhpur

but the art of begging, and their utmost stretch of science is to be able to read some forms of prayer, which they do not understand. Of course, as followers of Sankara Acharji, their buildings are all dedicated to Siva. Below these, towards the south, is a small old building, which was dedicated to Porusnath,⁽⁵⁷⁸⁾ the God of the Jain. The image has been removed, but the back wall of the temple is ornamented with a bas-relievo of Ananta⁽⁵⁷⁹⁾ lying on a serpent, with the goose of Brahma flying over him. The Sannyasis say, that Bhaidyonath has given orders that Jain should be no longer worshipped on this sacred hill, which is as much as to say that they, as the servants of Siva, have put a stop to the heretical worship. Some Jain however occasionally come. The Mahant says that he has no knowledge of who possessed the hill before the first of his predecessors in office. That it was previously a place of worship, there can be no doubt, as vast numbers of engravings in bas-relief, apparently of great antiquity are cut on various parts of the rock. They are all exceedingly rude. No one can say to what sect they belonged, as all the sects admit the same personages to exist, and use them indiscriminately as ornaments. None of the carvings appear intended as objects of worship, nor is any of them very indecent. They belong to all sects. I observed Porusram, Narayan, and Lakshmi, Ananta, Krishna, and Rada, Narsinga, Ganes, Hanuman, Siv, and many others, besides one of Jain.

I then went to the hill⁽⁵⁸⁰⁾ on the continent, which is the largest. Its bottom consists of rocks, on which many figures are carved, although not of such great diversity as on the island. The most remarkable is that of a female in a reclining posture, with several heads carved near her. It is said to represent a Rakisi⁽⁵⁸¹⁾ with the heads of her daughters. There

(578) Pārśvanātha, the 23rd Tīrthankara of the Jainas

(579) *Ananta*, 'endless', 'eternal', applied to Viṣṇu, and also to the serpent, Śeṣa, that forms the couch of Viṣṇu

(580) Generally known as Baisakari

(581) Rākṣasī.

are many Lingas one of them supported by Naikas⁽⁵⁸²⁾ or nymphs. On the top of the hill is some earth, and the tombs of a saint and his descendants. There is a little mosque, still in tolerable repair, but the houses in which the Muzairs⁽⁵⁸³⁾ were accommodated have gone to ruin. The present possessor said that the Pir, on his arrival here, found the place in the possession of a Kanphata⁽⁵⁸⁴⁾ Yogi, which infidel he put to death, and performed several miracles on the Rajahs who came to revenge his death. He at one time shut himself up in a small chamber adjoining to the mosque, where he spent forty days in prayer and total abstinence so that he became a very peculiar favourite of heaven. In a corner of the area in which the tombs are placed is a flag of stone on which this saint kneeled when at prayers. According to the Muzair, a gentleman, many years ago, struck it with the point of a spear when blood immediately issued from the stone, and he shows a small mark as the impression of the spear and a reddish stain as the remains of the miraculous blood. Immediately above this hill is the part of the Ganges called Utor bahini a very celebrated Tirta or place for bathing⁽⁵⁸⁵⁾. The water taken from this place is considered as peculiarly agreeable to Siva and two reasons are assigned. One is that the river runs here towards the north instead of towards the south which is the usual tendency of the course. This northern course however at present is so little observable and so much inferior to what happens where the water is no better than usual as at Paterghata, that some sceptics might cavil. The

(582) Nāyikā, a sort of goddess an inferior form of Durgā, and attendant upon her: there are eight Nāyikās (H. H. Wilson *Sanskrit Dict.*)

(583) i.e. *muwājir* the attendant or custodian of a Muhammadan mosque or mausoleum.

(584) A Kanphatā or Kanphatī (from *Kāṣa* ear and *phatā* torn) is a member of a sect of yogis or Hindu ascetics who may generally be recognized by their wearing ear-rings often very large made of jade or glass or even wood. They are described sometimes as founded by Gorakṣanātha.

(585) A *tirta* is a place of pilgrimage, not necessarily a bathing place, though the word is specially used of such a place on or near the bank of a sacred river: in fact this was the original meaning

other reason seems more unexceptionable. The God is said here to have treated the Ganga in a manner not uncommon for the Gods to behave towards other fair nymphs, and which may naturally be supposed to bring agreeable recollections to a deity, who chooses only to be addressed under the form of the Linga. On this rock I found a Gymnosophist from the west, who came up and said, in by no means a conciliatory tone. This is a vile country, at home I could get a rupee and piece of cloth from everyone I met, here no one gives anything. This rhetoric was not at all suited to find access to my pockets, and I advised him by all means to return home, lest the police should lay hold of him; for he was an exceeding indecent fellow. He did not go entirely naked, as many that I have seen, for he had a good rug on his back and shoulders to keep him warm, but his middle parts, before, were totally naked, and besmeared with ashes to render them more conspicuous.

22nd February — I went almost four miles to visit Munsardihi,⁽⁵⁸⁶⁾ said to have been the residence of a Khyetauri Rajah. The first $1\frac{1}{2}$ mile was on the Sultangunj road. At a canal, which crosses the road about $16\frac{1}{2}$ miles from Bhagalpur, I turned south for

(586) There is no such place on the SS, but the direction and distance point to **Nonsar** of the SS. I suspect that Buchanan wrote Munsardihi by a slip for Nunsardihi (*Non sar-dih*, the 'salt-tank-village')

It is noticeable that, in his description of this neighbourhood, Buchanan does not mention the name Jahāngirā, the name of the village between Masdi and Kamarganj. The usual explanation of this name is that it was called after Jahnu Muni, being a corruption of Jahnugiri, or the 'hill of Jahnu', but there has also been a tradition connecting the site with the name of the Mughal Emperor Jahāngir. Nicolas de Graaf (*Voyages*) records that when going up to Patnā in 1670 he walked from "Jangira" to "Gorgatte", i.e., from Jahāngirā to Gorghāt, and on the way he saw "the ruined palace of Jahāngir, after whom the promontory of which I have just spoken is called. This palace was almost entirely destroyed during the civil wars, but one can well judge from what still remains of the walls and of the arcades and pillars, which were very tall, that it had been a very fine building." In "Bajā Jahāngirā" there is an old *masjid* ascribed to Jahāngir, said to have been repaired by Rāja Rahmat 'Alī Khān of Kharakpur, to the south of the main road there is a site said to have been that of a building erected under the orders of that emperor, and to the north of the village, now in the river Ganges, there are the remains of a tower-like structure called by some the *Kachahri* of Jahāngir. I can find no record of Jahāngir himself having ever visited this vicinity and I mention the above traditions for what they are worth.

about a quarter of a mile through plantations that occupy the high banks of the river, after which I went about $1\frac{1}{2}$ miles over a low plain totally waste and which is deeply inundated for about two months in the year. Towards its southern side is Munsardihi, an elevated space for about four hundred yards in diameter and surrounded by small tanks, from which probably the earth has been taken that has raised the situation. In the earth thus taken out, I observe some Gangot. Many fragments of bricks remain on the elevated ground, and the ruins of a small temple. There is no appearance of the place having been fortified.

24th February — I went in the first place to see Dolpahari⁽⁵⁸⁷⁾ distant almost four miles. The country is very bare and flat. Dolpahari is a large rock of granite, extending north and south, and towards the latter ending in a conical peak on which a monument has been erected. The building is small but in good repair, and being white-washed looks well, in a country where there is so little appearance of art. At the east side of the hill, under the temple, is a brick house of decent size for the accommodation of the Mahant, a Dusnami Sannyasi and his disciples. I have nowhere seen [a] place in such a slovenly condition. The rock of which this hill consists is a small grained granite white or reddish felspar white quartz, and much black micaceous matter, which is generally disposed in flakes but the stone is very compact, and excellently fitted for building. When viewed from the south the rock appears to be disposed in very irregular great strata nearly vertical but inclining somewhat towards the east. When viewed again from the west there is an appearance of horizontal strata, but very irregular. On the east again the rock is scaling off in thick layers parallel to the surface of the masses. The whole of these appearances seem to me to arise from accidental circumstances in the decay of the rock which I imagine was at one time a solid uninterrupted mass. In one

(587) The little hill near Dolpahari Millik, about 3 mi. S by E. of Ghoghhat.

part I observed a large irregular bed of fat white quartz. The Mahant said that the buildings were erected by the ancestors of the Raja (Muhammedans), and that he was the thirteenth person in succession to his office.

From Dolpahari I went about three miles to Tanah Tarapur⁽⁵⁸⁸⁾. The country for the first three miles, rather low and bare; but here and there are small swellings, that might admit of villages, and some are thus occupied, and are planted. Farther on the country is mostly high, although quite level, and is very well planted, and exceedingly populous. The huts tolerable but not sheltered. Those towards Dol Pahari very miserable.

26th February — I went to visit the minerals towards Kojī Ghat⁽⁵⁸⁹⁾. The Baruya⁽⁵⁹⁰⁾ river in that direction is about two-thirds of a mile from the Thanah. It is a small sandy channel, without any stream at this season, but water is found at a very little distance below the surface. A little beyond it, I crossed a small branch of the same. Rather more than three miles from the Thanah, I came to the north-east end of a small hill, named Kajhuri,⁽⁵⁹¹⁾ which runs north 60° east and south 60° west by the compass, for about one mile, but is very narrow. It is divided into two portions, of which that towards the south-west is the highest. I ascended that towards the north-east, where there are many bricks, and some foundations of buildings, which are said to have been the house of a Khyatauri Rajah. It is probable, however, that these were temples, and that the abode of the chief was on an elevated space at the east end of the hill, which is covered with fragments of brick and

(588) **Tarapur.** In giving the distance from Dholpahārī as "about three miles", Buchanan has made a slip, as he writes of the country "for the first three miles" and then of the country "farther on". The actual distance is between 7 and 8 miles.

(589) **Kojhī,** 8 mi in a straight line due NW of Bānkā. The position is incorrectly marked on the 4 mi = 1 in map of Bhāgalpur district prepared in the B & O Drawing Office.

(590) **Badua N.**

(591) The hill appears to be more than a mile to the south of **Khajuri** village (S S) and about 2½ miles S E of Tārāpur.

probably consists of that material. North from this end of the hill are five small tanks, where there probably has been a town. The people do not pretend to know the Rajah's name. The hill is not so rugged as those consisting of granite but the surface is covered with stones and the rock appears in many parts running in vertical strata, nearly in the direction of the hill. The strata are thin and shattered, and have a very slight inclination towards the north west. The strata are not only tabular but their structure is schistose. A great portion consists of fat white quartz generally more or less granulated and in some portions formed into irregular crystals. Along with this, in the same plate or stratum are intermixed parallel layers of a fine-grained compact aggregate of a dark colour and often much impregnated with iron.

To this hill the country is in a fine state, and the villages tolerably good, at least the huts are hid by arbours ricinus and such like plants that conceal their misery and there are fine plantations separate from the villages. About five miles beyond the north east angle of Kajhuri some very large masses of granite perfectly irregular rise into a low ridge named Chautea pahar ⁽⁵²²⁾. The granite near the surface is in a state of decay but consists of middle sized grains of white quartz white or reddish felspar and black micaceous matter with some rust-coloured powdery matter. From Chutea to Khajuri and a little beyond it the country belonging to Korokpur is mostly occupied by Goyalas and is in a very bad state of cultivation most of the rice fields being deserted but near a small rivulet I passed for about two-thirds of a mile through a corner of Bhagalpur belonging to a small Malek zemindar whose lands were entirely in cultivation. He is probably highly assessed. About half a mile beyond Kajhuri I observed calcareous nodules in the soil and these are to be found occasionally in different parts towards the hills. From thence there are many scattered and stunted woods to Kojī ghat,

(522) Near Chutia.

which by the road I took, by Itari⁽⁵⁹³⁾ and Tiliya,⁽⁵⁹⁴⁾ may be $8\frac{2}{3}$ miles, but in the direct road, by which I returned, it is only about eight, that is, it is rather less than eight coses road distance from Tarapur. The country for this space is chiefly inhabited by Kol Kadar⁽⁵⁹⁵⁾ and other rude tribes, and their houses not being sheltered by arbours, or shrubs, look very wretched. Some are sheltered by dry branches, as in Banka. About a mile from the ghat, and extending a great part of the way towards it, are many bricks scattered in the woods. They are said to be the remains of a house of a Khyetauri Rajah, named Bharmayi. The ghat is formed by a narrow passage between Kaphri⁽⁵⁹⁶⁾ on the east, and Kharighati⁽⁵⁹⁶⁾ on the west, and a small channel fills the greater part of the passage. From this ghat four roads branch off. One to Tarapur, by which I came, one to Bhagalpur, by which timber and charcoal are sent, both of these pass clear of the hills, a third goes to Banka through another pass between Bharum⁽⁵⁹⁷⁾ and Barai,⁽⁵⁹⁸⁾ and a fourth to Kasmu⁽⁵⁹⁹⁾ between Phoki⁽⁶⁰⁰⁾ and Barai by a passage through which the channel comes. I went by this from the ghat about five hundred yards to a village⁽⁶⁰¹⁾ occupied by Kol, and where a trader in timber resides. At this village I found that the Kol had three forges, such as those I had seen before. They collect the ore, which is in the form of coarse sand, by winnowing the sand brought down from Barai and Bharum by torrents. In the place where

(593) **Itahri.**

(594) **Telia Pahar.**

(595) Kādar, an aboriginal caste allied to the Naiyās, practically confined to the Bhāgalpur and Sontāl Parganas districts (see Risley, *T & Q*, I, 367).

(596) Not named on the S S, but from a sketch inserted by Buchanan in his journal, it seems they are the peaks to the N W of Bharam, at the easternmost extremity of Khāwāpokhar Pahār, down the narrow gap between which the Belasī Nadi flows.

(597) **Bharam** (1168 ft) (S S)

(598) **Bara Pahar.**

(599) The **Kasmoh** of the S S

(600) This is the small hill by the south side of **Siradih**,

(601) The **Kojhi** of the S.S.

I saw them perform the operation, on the west side of Bharai ⁽⁶⁰²⁾ I found the pebbles of the torrent chiefly of a quartzose nature but some of them consisted of quartz mixed with a black micaceous matter which is probably the ore I found no such rock, for that which I found at the Ghat and which, judging from a distant view is the same with that on Bharum is almost entirely quartz At the Ghat it is divided into many irregular masses by fissures running in all directions nor has it any appearance of either stratification or of a shistose structure It is there in general fat and white but some parts are stained of a dirty red, and contain irregular flakes of a reddish matter On the north east face of Tarha ⁽⁶⁰³⁾ hill, adjoining to Karighatī which consists of the above-mentioned white quartz I found a very large mass but whether a rock or detached stone I could not determine It had no appearance of stratification but in some parts showed a tendency to a shistose structure and consisted of aggregate grains of a clear and brownish diaphanous quartz Between the Ghat and the Kol village there is a rock of shistose mica, so much shattered that it is of no use, nor could I determine any regular position of strata, but about $1\frac{1}{2}$ miles south westerly from thence and adjacent to the west side of Borai is a quarry of shistose mica which is wrought for the stones of hand mills It is divided into irregular trapezoidal flags by fissures which run east and west at from two to four feet distance from each other by others which cross these at right angles generally at greater distances and finally by horizontal fissures at from one foot to six inches, but these flags are so much shattered, that solid masses even for making the stones of a hand-mill cannot everywhere be procured If it were not for that circumstance this would be a fine stone for building as it cuts well, and does not tarnish much in the air All the granites obtain immediately on exposure to the air a very ugly black coat, a kind of

(602) The Barai above i.e. Sara Pahar of S.B.

(603) One of the central peaks of the Khawapokhar Pahar

mould, I believe, but this has a fine light greenish hue. In some parts it is stained red. The layers of which its masses consist, are horizontal in the quarry.

28th February — I went to visit Kheri⁽⁶⁰⁴⁾ hill. I went first to Lokhyonpur,⁽⁶⁰⁵⁾ a considerable village on the Sultangunj road, where there is a neat but small dorga of brick. It is rather less than three miles from Tarapur. About a mile farther I came to Asorufgunj,⁽⁶⁰⁶⁾ a very large village and market place. Here I left the great road. Near this were eight or ten wretched huts or sheds of the . . . ⁽⁶⁰⁷⁾ who catch birds. They are most clamorous beggars, men and women, but healthy good-looking people, almost naked. About $2\frac{1}{2}$ miles from thence I crossed the Buriya,⁽⁶⁰⁸⁾ which passes close to Tarapur. It has a wide sandy channel, in which water is found by digging, but the water is stagnant, and at this season cannot be conducted by canals. It serves, however, for irrigation, but it is not much easier procured, than water anywhere else, as in great many places here the water may be had by digging to a very few cubits. About $3\frac{1}{2}$ miles from thence I crossed a very narrow channel, called the Bela,⁽⁶⁰⁹⁾ which contained a small stream. I am not sure, but it may be a canal from the river next to be mentioned, the Izara,⁽⁶⁰⁹⁾ which is narrow, and breaks a good deal of ground by its windings, but contains much water, where I saw it quite stagnant, but that was probably owing to its being dammed to send off water for irrigation. I crossed it about a mile from the Bela. About $2\frac{1}{2}$ miles farther, being near Kheri hill, I began to find bricks in the soil, and these were observable

(604) The hills indicated near **Kasba Kheri** on S S

(605) This would appear to be the village marked **Shahabad** on the S S

(606) **Asarganj**, adjoining Jalalabad. Buchanan first wrote **Asorgunj**, and afterwards added the *uj*

(607) Blank in the MS

(608) **Barua N.**

(609) These names do not appear on the S S, but on examining Sherwill's old Revenue Survey map it is clear that the streams in this vicinity have been shifting their channels. Buchanan seems to have gone via Nayāgāon and Ratanpur to Purānī Kherī

till I reached Khyeri bazar,⁽⁶¹⁰⁾ at the northern end of the hill of the same name, which runs north and south instead of east and west as represented by Major Rennell who was probably misled by having seen it and the adjacent small hills from the river. It consists of seven small hills united as in the plan of which the three northern are the largest. It is surrounded by four small hills as in the plan. I only visited the three northern and higher parts of Khyeri which consist of a vertical rock running north east and south west by the compass, and composed of thin parallel strata, approaching, where most entire, more nearly to Petrosilex or rather Jasper than to any other substance, but consisting of many very small grains forming an aggregate. In some parts the petrosilex is mixed with very irregular layers of white quartz forming one compact stone. In many more it has a decided shistose texture, to which the whole has some tendency. Where the shistose texture is most decided the stone has somewhat of a granular fracture, and assumes an appearance approaching to that of a very fine grained shistose mica. Kheri, the people say, is three coses long, but that seems to me to be much exaggerated. Kheri was the chief seat of the Khetauri Rajahs and many small tanks with scattered bricks all round the northern end of the hill, to a very considerable distance, show that they have been chiefs of no small power. All the three higher eminences of the hill contain ruins, which I shall now describe. From the bazar a road slopes up the eastern face of the first hill to where it joins with the second. This road is formed of flags, cut from the mountain, and, where the hill is steep forms a kind of stair, and where more level, a kind of pavement, both very rude. Having reached the summit, the road divides into two branches, one extends north-east to the edge of the hill that overhangs the bazar, where the foundations of a small brick building may be traced, but bricks are scattered

(610) Kasba Kheri. No mention of this interesting old site is to be found in the *Gazetteer*. See A.S.J. Vol. VIII pp. 23-24.

the whole way, there probably having been many small chapels. On a rude flag, lying by the side of the road, are engraved one short line consisting of seven letters, but some have probably been broken from the beginning. No person can tell in what character they are written ⁽⁶¹¹⁾ See Facsimile near the small chamber is another flag with some rude carving on it, in—the accompanying form ⁽⁶¹²⁾ This place, the people of the village say,—was the Rajah's Hawa khana, ⁽⁶¹³⁾ but that is exceedingly doubtful. The other branch of the road, ascending the second hill a very little way, divides into two arms, the lower of which goes for a few yards to a very fine well, lined with brick, and at least sixteen feet in diameter. A wild fig has been allowed to take root, and has thrown down the walls, so as to choke the well entirely. The other arm of the road leads up the hill for thirty or forty yards, to a Linga made of stone, and more resembling the object it is intended to represent than any other that I have seen. Immediately south from thence is a great heap of bricks, which is commonly called the Rajah's house, but appears evidently to me to have been a temple; for the situation from the steepness of the hill would have been exceedingly inconvenient, unless intended as a place of strength, and there is not the slightest trace of fortifications ⁽⁶¹⁴⁾ This heap consists of two parts, one between the linga and the summit of the hill, and the other on the summit. The walls of the former seem in some measure to remain but the roof has fallen in, leaving an irregular mass of bricks with

(611) Beglar, in *ASI*, VIII, 129, writes of numerous inscriptions "almost all in the shell characters." The site has not been very thoroughly examined yet.

(612) Buchanan inserts a hand sketch of what is evidently a conventional, ornamental design, a quatrefoil with diagonal cross-lines enclosed within a circle.

(613) Literally 'air house', a place in which to sit and enjoy the fresh air or breeze.

(614) Yet Beglar, in an account (*loc cit*) which otherwise also reads as if he had not made a very close examination of the site, writes of "the fort on the hill" as "an irregular enclosure of rough large blocks of stone laid on each other without cement, occupying the whole of the tolerably level top of the easternmost hill", of a 'citadel', "outer fort", etc.

a cavity in the centre. Near the linga in this building is a pillar of granite the top projecting from among the bricks three or four feet. The natives imagine this was the place where the Rajah's elephant was tied just as if his stable would be adjacent to his god. The building on the summit is immediately adjacent and some of its foundations remain made of cut granite. The walls have fallen down the hill, where many stones remain. They are of granite like that of Dol pahari and [there] have been doors, windows &c, rudely carved. A Ganesa on one of them is very plainly distinguishable and there are other figures, but so much defaced as to be no longer recognisable. This building has been a square of twenty or thirty feet. Small buildings have extended from this all the way to the third summit of the hill, and end towards its southern declivity in a chamber of brick about nine feet square with exceeding thick walls, and one door towards the north-east. The walls remain to about four or five feet in height. The people call this the women's apartment but we can scarcely suppose that even a Hindu lady could endure to be smothered in such a hovel. It looks more like the den of a hermit.

1st March —I went to Khorokpur ⁽⁶¹⁵⁾ the Rajah, who has been vastly civil, wishing for a visit. About half a mile from Tarapur I came to the Chara ⁽⁶¹⁶⁾ which is said to be an artificial canal taken from the Buriya. Its channel which is sandy, is smaller than that of the river but at this season it seems to contain more water as a canal taken from its sand affords

(615) *Kharagpur* The correct spelling of this name is doubtful. Though perhaps generally pronounced Kharagpur by the illiterate folk I have frequently heard it pronounced Kharakpur. With illiterate rustics, moreover a *k* is not infrequently slurred into a *g*. Kharagpur would mean sword town; and there is the usual legend explaining why it is so called. The story is not a very plausible one and I have always suspected that the name was derived from Kharak (खरक) meaning a cattle-

shed. In the old days when the hills were covered with forest and grass, they would be much used for pasturing cattle. These would be collected before nightfall and kept in pens just below the *ghāṭ*. The entrance to this important *ghāṭ* would be just the place for such cattle-pens.

(616) A branch of the Badra N., not named on the S.S.

even now a fine stream for irrigation Having followed the course for about a quarter of a mile, I went about two miles to the Sakri,⁽⁶¹⁷⁾ a deep channel in a stunted wood, with some stagnant dirty water About $2\frac{3}{4}$ miles farther I crossed the Mohana⁽⁶¹⁷⁾ and Aura⁽⁶¹⁷⁾ at their junction, two small streams containing a little water, but their channels narrow From thence to the Mon,⁽⁶¹⁸⁾ which passes through Khorokpur, is not quite two miles Tarapur is very pleasantly situated It swarms with beggars, among which were two dwarfs One three feet $9\frac{1}{2}$ inches, tolerably well formed The other less, but distorted about the legs, both men Khorokpur is eight miles from Tarapur I was met by the Rajah about $3\frac{1}{2}$ miles from his house, at two tanks and two small Hindu temples, which had been built before the conversion of the family The temples are ruinous and when I asked to what gods they belonged, the Rajah said that they contained no images These, I suppose, the Rajahs on their conversion had thrown out Heavy complaints both at Tarapur and on the road against the Izaradar, the people say that they must run away They cannot pay the expense of a suit

Khorokpur is a large village situated on both sides of the Mon, the Rajah's house and Mosque being on the right, and the Imamvari⁽⁶¹⁹⁾ on the left The Rajahs had formerly a very large house of brick, but in the disturbances, during the time of the present occupant's grand-father,⁽⁶²⁰⁾ it went to ruin, and the present buildings are but mean, although of great size A part is of brick, and some is tiled, but the greater part consists of mud houses thatched The

(617) Buchanan's Sakri appears to be the **Belharna N.** of the S S, and his Mohana the **Sakri N** of the S S The **Aura** is not named on the S S

(618) **Mani N** the name is Man, not Mani

(619) i.e. *imāmbārā*, the place to which the *ta'ziya*, or shrine of Hasan and Husain is conveyed during the Muharram, being there kept

(620) i.e. Rāja Muzaffar 'Alī The Rāja in Buchanan's time was Qādir 'Alī, son of Fazl 'Alī, according to a MS history of the family in my possession (not Faiz Ali, as stated in the *Gazetteer*) 'Fazl 'Alī was the second son of Muzaffar 'Alī

Rajah moves about in great state, but his other expenses, I presume, are moderate. Two sons ⁽⁶²¹⁾ now lads are taught at home, from whence they have never been sent. The father has been at Bhagalpur and Monggir, and is an exceedingly civil man, but seems to have very little intellect. However, he looks more after his affairs than most other zemindars but his law suits with Rup Narayan have involved him in debt to his Dewan, in whose clutches he is now secured, and the estate will probably be ruined ⁽⁶²²⁾. The Mosque is a small but very neat building of three domes in the best style that I have seen. The Imamvari was formerly thatched, but the Rajah is now occupied in building one of brick which promises to be a handsome work.

2nd March —In the first place I went two coses to a hill named Murla ⁽⁶²³⁾ on the east side of the Monggir cluster. About three miles from Korokpur a considerable rock appears on the surface, broken into rhomboidal fractures in all directions, and consisting entirely of white fat quartz. Some of the masses have a shistose appearance, others have not which I look upon as accidental, from a difference of position in decay. I cannot say positively whether or not the solid mass anywhere appears on the surface. About two hundred yards farther on is another similar rock. These I left on my left hand. Where I reached Morla is the appearance of an old wall of stone, called Murcha and said to extend to Mongger. Morla is a considerable hill of quartz, perhaps a mile long and three hundred feet high, with great masses of bare

⁽⁶²¹⁾ Perhaps Iqbāl Ali and Rahmat Ali sons by the first wife, who succeeded to the estates in about 1819 and 1826, respectively.

⁽⁶²²⁾ And so it happened some thirty years later when the estates fell into arrears of revenue generally thought to have been due to the rascality and intrigues of the rāja's subordinates and were sold. The main portion of the properties was purchased by the Banāli family till then little known. The headquarters pargana Haveli Kharagpur was bought by the Maharāja of Darbhanga since when it has been much developed.

⁽⁶²³⁾ Not named on the S.S. The latest editions that I have been able to obtain of the 1 mi. = 1 inch sheets and of the 4 mi. = 1 inch district map have been of little use as far as hills are concerned in the Monghyr district. Even the large reservoir or Kharakpur Lake formed more than fifty years ago (see below) is not shown on either of those maps!

rock At the Murcha it is reddish and somewhat granular, like what for the last few days I have called Petrosilex, but I am now convinced that the whole is quartz or Jasper, as it has not the proper conchoidal fracture of Petrosilex At the north end of the hill it is white, and less granular, and the rock on the opposite side of the river, on the large hill Dewa,⁽⁶²³⁾ is of the same nature On the west side of the hill again, at Haha,⁽⁶²³⁾ this rock is most decidedly granular, white intermixed with reddish and greenish spots In all the places, although I saw vast masses of the naked rock fairly exposed, nothing like strata can be observed It is divided into rhomboidal masses very irregularly by fissures in all directions The only extraneous matter observed in this rock was at Haha, where a large nest, about ten feet each way, is exposed by the wearing away of the river It is of a soft miscaceous black or iron-grey substance with a silky lustre, and remarkable waved foliated texture and very heavy I have no doubt that once it was entirely embedded in the quartz, which has been worn away by the Mon Alighting at the Murcha, I walked about half a mile to where the Mon forces its passage between two great rocks, one on Murla and the other on Dawa This is called Sunduyar Ghat⁽⁶²⁴⁾ Immediately above this the Mon is joined by a smaller rivulet the Panch-Kumar,⁽⁶²⁵⁾ which comes from a hill of the same name, and has a course of about two miles, through a swelling valley, entirely covered with trees, but of a fine soil From this gap I went about half a mile to the west side of Morla, where there is a small waterfall called Haha,⁽⁶²⁵⁾ and a deep pool above it, owing to the Mon being confined by a ledge of rocks The Mon rises at Bhim Ban⁽⁶²⁶⁾ about

(624) The gap through which the **Sindhwarī N.** issues from the hills Inside this gap, to the south-west, now lies the important irrigation reservoir formed by damming the *Mān river*. A description of the scheme will be found in the *Gazetteer*, (1926 edn, pp 96—98)

(625) *Hāhā* is an onomatopæic word, signifying a laughing sound, hence the name of the waterfall The name will recall to many a peon by Long-fellow

(626) *Bhimbāndh* would be 9 mi distant in a straight line, but much further by any practicable path

three cosses southerly from Haha. It is a rivulet which contains a considerable run of water at all seasons. The water at Haha has a lurid ash colour, which does not promise any salubrious effects. At Korokpur indeed it is clear at this season and is considered by the people there as wholesome, but they admit that it will kill all new come Mogols, and that no animal from the Mogol country especially the ass and camel will live if they drink the water. In fact, I suspect that it is very unwholesome to every person who has not been inured to it from youth.

Having returned to the Murcha I proceeded towards Ronganath ⁽⁶²⁵⁾ and passed on the other side of the quartzose ridge, which is named Picheli and Kurnakumar ⁽⁶²⁵⁾ or the young buffalo. It is long but of inconsiderable height. Near the south end and about two miles from Morla, a large rock of granite projects from the forest but cannot be said to form a hill. From thence to Ronganath is about $3\frac{1}{2}$ miles. On the whole Ronganath from Morla is about $5\frac{1}{2}$ miles. A mile from the Murcha I crossed a small dry torrent called the Putgagar, ⁽⁶²⁵⁾ and about half a mile from Runganath I crossed another called Sawarni ⁽⁶²⁷⁾. Runganath is a narrow ridge rising with a moderate ascent from the south, and ending abruptly towards the north. On the summit is a small rude brick temple of Siv but the view is remarkably fine. At the south extremity of the hill the rock is of white quartz, without any appearance of strata. The rest of the hill consists of very fine-grained shistose mica, in a state of decay. It runs from north north east to south south west, and is inclined from the perpendicular to 30° towards the west. Amongst the strata are many irregular masses of white fat quartz, sometimes as wide beds, one to two feet thick, and others in narrow parallel veins.

(625) None of these are to be found on the S.S.

(627) Not named on the S.S. It is the Subarni of Buchanan's map.

From Ronganath I went rather less than two coses to the west side of Ungchanath,⁽⁶²⁸⁾ passing a drv small channel, called Bagara,⁽⁶²⁸⁾ about a mile from the former, and another named Kutīya⁽⁶²⁸⁾ about 1½ miles farther on

Almost the whole country through which I passed to-day consists of stunted woods or bushes, in which are a few small scattered spots of cultivation, with most wretched huts. Unchanath is a very irregular hill of granite sending up from its highest part a very narrow peak of rock, on the summit of which a small math⁽⁶²⁹⁾ of — has been built, but the image has been for some time removed. The Math is accessible only by means of several ladders, which are placed upon the most sloping part of the rock, towards the west. None of my Hindus would venture up, although very desirous, and encouraged by the example of a Muhammadan Laskar. There are some small temples, particularly one of Siva, on more accessible parts of the rock. The Panda is a Rajput.

3rd March — I went rather less than five coses to Gauripur⁽⁶³⁰⁾. About 1½ miles from Unchanath I passed the north corner of a small hill of granite, named Gusī pahar,⁽⁶³¹⁾ both west and east from it several rocks are exposed on the surface. About half a mile farther, I passed about half a mile north from another small hill called Koirā⁽⁶³¹⁾. About half a mile beyond that I crossed the Sakrī,⁽⁶³²⁾ a pretty large sandy channel, in which water may at all times be found by digging. Less than a mile from thence is a very inconsiderable torrent⁽⁶³³⁾. About 2¼ miles

(628) None of these names are to be found on the S S. Unchhānāth may possibly be the hill marked near **Nonañi** and **Debghara**. The Khutīya is shown on Buchanan's map (but not the Bagara).

(629) A monastery (*math*). A blank has been left in the MS for the name.

(630) **Jogibara** (Gauripur) on the S S.

(631) Neither named on the S S.

(632) **Sakrī N.**, and three miles upstream marked **Mahani N.**, on the S S.

(633) The **Belharna N.** of the S S, the **Bela** or **Belhar** of Buchanan's map.

from Gauripur I crossed the Boruya,⁽⁶⁸⁴⁾ a wide channel and even now it contains a little water above the sand but only in pools. People whom I had sent on to clear the road from Tarapur, had wasted their whole time in clearing a jungle here and this was totally superfluous as the road which they cleared was so circuitous that I did not follow it, and came straight through the woods without any difficulty. They had done the same between Korokpur and Ungchanath and my baggage was brought five coses in place of three. Gauripur is a wretched village of a few huts near a small tank dug by the lady of one of the first Rajahs before their conversion. A little west from the tank is a small brick Math of Parwati still entire, and one of Siva in ruins. South from this is a vast rock of granite forming a small hill. The crevices of the rock are filled with trees. It is said to harbour tigers bears hyænas and porcupines. At its east side is a smaller rock on one stone of which is a short inscription in the common Nagri and on two others are some rude lines [?] representing solid temples of Bouddh which seem to be of great antiquity and I think traces of writing may be perceived on one of the mouldings of each but so much defaced that my painter does not think the marks have been letters. Some of the village people say that they remember them entire but little dependence can be placed on what they say. The owner of a neighbouring small estate is a Hindu of the Rajah's family. He assumes the title of Babu. I had been led to expect that the inscription was very long.

Jomdoho⁽⁶⁸⁵⁾ being too distant for two days journey I intended to have divided the road into three equal shares but was told that would be impracticable as after entering the great wood, two coses distant, the nearest place would be Kasmow⁽⁶⁸⁶⁾ distant eight coses. I therefore determined to make

(684) Badua N

(685) Jamdaha.

(686) Kasmoh

a halt at Tauhurnagar, ⁽⁶³⁷⁾ the only place where water is procurable

4th March—I accordingly went to that place, and halted on the south side of a considerable tank, in a stunted wood, about $4\frac{1}{4}$ miles from Gauripur. About three miles from that place I crossed the Lohagor, ⁽⁶³⁸⁾ a sandy channel now dry, and thirty or forty yards wide. Here and at the last stage, the chief population consists of Musahar and Bhuiyas, both most wretchedly stupid, and helpless. The latter now pretend to be Surja Bongsi.

People whom I sent to Rata Pahar ⁽⁶³⁹⁾ brought me specimens of all the rocks which they observed there. These were mostly quartz as near Kojī ghat, some pure white and simple, others like that at the bottom of Tarrha ⁽⁶⁴⁰⁾ hill, others again with various admixtures of mica, forming from what I formerly called hornstone, until they gradually become shistose mica. From thence was also brought a specimen of the rocks of black schorl and quartz, of which I had only seen fragments at Kojī. The only different stone is an aggregate of Chlorite and white quartz.

5th March —I went to Guntī Lodun ⁽²⁴¹⁾. Dreadful accounts were given of the difficulty of the road, and I therefore had sent on people to clear it, which I found they readily did, by once in two or three hundred yards cutting down a few bamboos or branches, that hung over the road, which is far from bad, and is daily frequented by carts. Even this precaution was not absolutely necessary, as owing to stupidity or perversity in my guide, or perhaps, to both, he led me for about four miles out of the direct road, which had been cleared, and took me a circuitous route, to which nothing had been done. I found

⁽⁶³⁷⁾ Not on the S S, but it lay near Banbarsa. It is marked as 'Iuhur Nugur on the old R S map

⁽⁶³⁸⁾ Lohagara N.

⁽⁶³⁹⁾ The hill to the E and SE of the village Rata.

⁽⁶⁴⁰⁾ See under date 26th February, note (603) above

⁽⁶⁴¹⁾ Gangtī and Lodhan, two small villages on opposite sides of the Gmī N.

some inconvenience in forcing through among the branches but not very great. About half a mile from the tank I came to a low ridge of quartz, running west southerly and east, northerly between the south end of Rata and a small hill on my right, which seems also to be quartz. About two-thirds of a mile farther having had the Soruyi ⁽⁶⁴²⁾ a dry torrent on my left I came to Tauhurnagar Ghat, between two small hills that consist of shistose mica which like all the rocks that I saw this day in which stratification can be observed, runs west, southerly and east, northerly in a vertical position. As I crossed their direction nearly at right angles only inclining a little towards the east the whole rocks may be considered as alternate strata. About two miles farther I came to a small torrent ⁽⁶⁴³⁾ where also the strata were quartzose and all the way from the ghat to that place the loose stones were of that nature. Here I ascended a low ridge on which were many projecting masses of granite in decay evidently running in the same direction with the other strata, but having no appearance of a shistose structure. About a mile from the last mentioned torrent and on the opposite side of the ridge which is very low, I came to another dry torrent named the Bindera ⁽⁶⁴³⁾. The rock there is exactly of the same kind of granite, but the structure is evidently shistose another instance to show that this structure is often owing to accidental circumstances in decay. A very little three hundred yards beyond that is a ridge of quartz and about four fifths of a mile farther large masses of naked granite on a level with the surface in which there is no appearance of stratification. From this a hill called Nara Pahar ⁽⁶⁴⁴⁾ bore south west. The granite continued for more than half a mile, when the north and highest end of Underkot hill ⁽⁶⁴⁵⁾ bore about east from me. About four fifths of a mile farther I had

(642) Sahroi M

(643) These streams are not named on the S.S.

(644) Narha Pahar

(645) Evidently Malui Pahar of the S.S.

the above hill called Nara on my right, and the higher parts of Underkot on my left, the former near; and both from the stones on the road and its appearance, I have no doubt that it is granite. About two-thirds of a mile farther, I came to another rock of shistose granite, and saw a high hill named Beharu⁽⁶⁴⁶⁾ to the south-west, at a considerable distance. About two-thirds of a mile farther, I came to the summit of a low ridge, which extends from Underkot, and consists of white quartz, in which are deseminated grains of yellow mica. About a mile and a half beyond this I came to a rock of solid granite. About $1\frac{1}{4}$ mile farther I came to the torrent called Chandon Turi,⁽⁶⁴⁷⁾ where there is a rock of beautiful shistose mica, white quartz, and large scales of black mica. About four-fifths of a mile further, on the highest part of a ridge extending from the Kasmau hills on my left, I found a rock of quartz evidently in vertical strata. About half a mile farther at Kasmau,⁽⁶⁴⁸⁾ a miserable village, the rock is granite. Rather more than a mile farther on I came to a small dry torrent named Dhuma Jhar,⁽⁶⁴⁹⁾ beyond which is a small ridge of the same name, and about a quarter mile wide, beyond which is the boundary between Tarapur and Banka. About a mile and a half farther, I came to Gunti Lodon, a village on the banks of a large sandy channel, in which, even now, there is a small stream, running from the west. Gunti is on the north and Lodon on the south side of the river, and there I halted in a very beautiful situation capable of high improvement. Paradi⁽⁶⁵⁰⁾ where I went to visit the

(646) **Biharu Pahar** (1324 ft), a name which, as the "Beharow Hills" Rennell applied to the whole range

(647) The headstream of the **Belasi N**. There is a village Chaudanthāra close to where Buchanan crossed it

(648) **Kasmoh**.

(649) Perhaps the **Kharuajor N** of the S S

(650) i.e. Pāhāridih, not marked on the S S, but shown as Puhareedeeh on the old Rev Sur sheet. In the margin of the MS Buchanan has written the name again in Bengali characters and in English as Pāhāridih.

NOTE—It was in the case of these journeys of the 5th and 6th March, between Tuhūrāgar and Jamdāhā, that Buchanan entered in the margin of his journal the "Minutes road journey" that furnished the late Mr V H Jackson with a clue to the method followed by him in calculating the distances recorded. (See *Patna Gaya Journal*, Introduction, pp xi—

first iron mines from Banka is said to be one cose east from this and four coses north west by west from Jomdoho

6th March —I went to Jumdoho ⁽⁶⁵¹⁾ At Lodon the rock is granite The rocks are stratified in the same manner as yesterday, only they incline more to the north and south, so that I crossed them more nearly at right angles Less than a mile from Lodon [I] came to a rock of granular white quartz About one and a half mile farther, in a small torrent names Humuri ⁽⁶⁵²⁾ the rock was a fine-grained rotten shistose mica granite About $2\frac{1}{4}$ miles farther I came to a considerable torrent named the Amera ⁽⁶⁵³⁾ at the boundary between Khadirali and Rup Narayon ⁽⁶⁵⁴⁾ The rock here also is fine grained rotten shistose mica About half a mile farther, in a small torrent named the Sugabara, ⁽⁶⁵²⁾ the rock was a granite in a state of decay, evidently running in vertical strata, but not shistose Beyond this I crossed a steep ridge, rather more than a quarter of mile wide to the Butuyariya ⁽⁶⁵²⁾ About $1\frac{1}{2}$ mile farther on I crossed again the Amera The rock a small grained granite of two kinds one reddish brown felspar, white quartz black mica In some places this was sound, without any appearance of parallel layers in others it was in decay and had become shistose The other was quite sound dark grey felspar, or rather hornblend and white quartz and black mica both in very small quantities This stone approaches to a lapis corneus, but is too hard About two-thirds of a mile farther I crossed the Amera a third time, where it enters the valley watered by the Kurar, ⁽⁶⁵⁴⁾ to the bank of which was about an equal distance The Kurar is a very wide sandy channel (120 yards) from which water is taken for irrigation The cultivation extended about half a mile on its northern bank The valley would

⁽⁶⁵¹⁾ Jumdaha, 10 mi. south of Bānkā, on the Chāndan river

⁽⁶⁵²⁾ None of these are named on the S.S.

⁽⁶⁵³⁾ For an account of the dispute between the Kharakpur rāja and his ghaṭwāl of Lachmipur see Murphy *Final Report Sur and Set. Bāgalpur Dist.* 1912 p. 14 para. 33.

⁽⁶⁵⁴⁾ Kudar M.

be exceedingly beautiful, were the state of the people better ⁽⁶⁵⁵⁾ They are a very poor sickly-looking people, mostly armed with swords From this I crossed a ridge, about two-thirds of a mile wide, on which I observed many stones of white quartz, but no rocks of that substance I then went about half a mile through the valley of the Chandon to Jomdoho which stands on the bank The road passable in a cart the whole way, only some difficulties in the richer valleys Many roads in all directions through the woods In the afternoon I was visited by Rup Narayon, who came with a good many armed men, very meanly attired He rode on a tatoo, and a palanquin followed He is a little man, stout but very ill-made, with a vulgar murderous-looking countenance, and his manners are as rustic as his appearance He is not uncivil, but has no one thing about his appearance like a gentleman He probably imagines, that on account of the civilities of Khadir Ali, I have become his enemy, as in place of the kindness with which his people formerly supplied me I here find a difficulty in getting anything I asked him in the most civil manner for his genealogy, promising that I understood he was of a very ancient family, on which he talked of some of the legends about the Surjo bong, which he had learned from his Purohit, but declined giving me any account of his immediate ancestors, asking me very bluntly, what I wanted with his genealogy I told him, that in the account which I must give to the Governor General, I wanted to give an account of all the old and distinguished families in the country, and, if I could not procure any account of his, I must conclude that none existed, which I believe is the case ⁽⁶⁵⁶⁾ The chief muhurir, so far as I can learn, knows only the names of three generations, before whom the family

(655) A remark characteristic of Buchanan, who associated beauty of natural scenery with well-tilled fields and neatly-kept cottages

(656) He was the son of Jagannāthadeva, and the nephew of Lakṣmanadeva, the eponymous founder of Lachmipur The fullest account of Jagannāthadeva's activities is given by Browne (*India Tracts*, 1788, pp 45—61)

were probably infidels, and had barbarous names. The Muhurir acknowledges that they were all notorious thieves, of which therefore they are not ashamed, as he certainly would not say anything that would give offence to his master. I then asked the chief to assist me in procuring some wild animals. He said that so many fellows with carts and bullocks now went through all parts of the woods, that no animal could remain in them. He then asked me in a very blunt manner, why I had come into the country, I told him that I had come to see what kind of a country it was and in what state the people lived. He said that it was a poor forest to which I replied that I was surprised it was not better cultivated considering that the Company had fixed the revenue, and that all the profit must accrue to the zemindars. He said, who would cultivate such a jungle where rice would not grow. I told him it would produce Maize, Janera, Meruya, Sirsoo, Cotton, Kulti and til. He then said there was no water in most parts and who could make tanks or wells. Seeing that nothing could be made of him I requested that he would retire to take some refreshments after his journey. He then asked if he should go home to which I said by all means whenever he pleased. He still keeps up a large armed rabble to whom he gives lands in the woods reserving the good lands near the rivers to enable him to pay his rent. His followers are stout little men but have rather a sickly appearance and seem to be very poor. It is said that he has collected a thousand muskets and is perhaps meditating some scheme of outrage as he is discontented with the decision of the court in favour of Khadir Ali and probably thinks himself a person of no small consequence.

7th March — I went to the corner formed by the junction of the Kurar with the torrent called Tupsateri ⁽⁶⁵⁷⁾ in order to see a quarry of what is

⁽⁶⁵⁷⁾ The Chilikara M. of the S.B. but marked Tapaitari on Buchanan's map.

called Osurhur,⁽⁶⁵⁸⁾ or giants' bone, a substance from which lime is prepared, and in hopes, from the name, of finding something curious

The quarry is about $3\frac{3}{4}$ miles west from Jomdoho, in the angle between the two torrents. The Karar⁽⁶⁵⁹⁾ is a very wide sandy channel with a little clear water in shallow pools, and its sands are quick. It comes from a great distance from the south-west, but here its course is north and south. The Tupsateri comes from a place called Katgori⁽⁶⁶⁰⁾ three cosses south from the quarry. It is on the west or left side of the Kurar, and is a much smaller channel, but it contains some deep pools of dirty stagnant water. On its banks the rock is in such a state of decay that it is impossible to judge of what has been its contents, but it has been an aggregate, of which the quartz only remains. The Ossurhur is procured by digging about a cubit in the soil, when it is found mixed with white quartz. Sometimes it is interposed loose between the masses of that substance, sometimes it envelopes them, and in general the two substances adhere. They do not form a continuous mass, and, so far as I could dig with a hatchet, had some earth intermixed. The natives say that the deeper you go, the more perfect the Osorhor is found, but they do not seem ever to have made the experiment to any extent, as I found no hole more than three feet deep. It supplies the neighbourhood with lime, but very little is required, the common demand being only for chewing. Some maths, however, have been constructed with it, and I saw the remains of three small kilns, in which it had been burned. In the Kurar the rock consists of black foliated micaceous matter disposed with white quartz after the manner of shistose mica, that is, all the micaceous plates are parallel, and run in the same direction, which here is vertical.

(658) Buchanan writes the word in Bengali characters in the margin of his journal as *asūrhar*. The correct word is *asurhār* (from *asura* and *hār*, 'Asuras' bones'). See below, under date 22nd March. The site visited here by Buchanan was in the vicinity of **Maupatha**.

(659) **Kudar N.**

(660) Not marked on the S.S.

Certain layers running in the same direction consist entirely of white quartz, forming as it were, parallel strata. Where the rock is entire, these strata occasion no discontinuation of substance nor is there any appearance of a shistose structure, farther than the parallel disposition of the component parts, but in decay the stone divides into thin parallel layers and assumes a shistose structure. The quartz decays last, or rather remains entire after the micaceous matter has entirely disappeared, and the stone often retains its form when it no longer is any more than a friable sand which crumbles between the fingers. The parallel strata of quartz are from a quarter to three inches wide, those of the granitel interposed are from two inches to several feet. From the banks of the Kurar to within about half a mile of Jomdoho I observed the rock in eight places, and it uniformly consists of the same materials, that is of a black micaceous matter and white or glassy quartz. At the first place nearest the Kurar it was fine-grained granitel, without any shistose disposition in its micaceous matter which is irregularly scattered. It was perfect and had no appearance of strata. 2nd Same rock with less white quartz where entire, no appearance of strata where decayed and where much of the black mica had disappeared it was disposed in thin vertical strata running north west and south-east. This decaying part was about four feet wide, while the entire unstratified matter extended many feet on both sides of it and came contiguous to it. 3rd The rock was rather in decay. Its texture somewhat acerose. 4th Same granitel as no 2. 5th A coarse grained granitel with little quartz. 6th A fine-grained granitel in no manner shistose but with alternate layers of quartz and in vertical strata. In a state of decay it is almost white having lost most of its mica. Its fissures are as often in the granitel, as in the quartz and seldom at the junction of the two substances. 7th A shistose granitel, as in the channel of the Khurar. 8th A coarse-grained granitel with much quartz. At Jomdoho on the banks

of the Chandon, south from the village, is a small hill called Gheruya,⁽⁶⁶¹⁾ which is entirely different from the above. Its strata evidently run about south-west and north-east, and have a great inclination from the perpendicular towards the north-west. The strata are much divided by fissures in all directions. They may be all considered as a silicious stone of conchoidal fracture with more or less quartz in veins or nodules, and some other substances in nodules like porphyry. The substance is not uniform, but is often clouded of different colours like Jasper. The uppermost stratum is decayed into a granular substance, still however extremely hard, which, if I remember right, is similar to what I took at Jetaurnath⁽⁶⁶²⁾ for decayed granite. Under that is a stratum which has a very slaggy appearance. The one most perfectly conchoidal, and uniform in its substance, which cuts smoothish with a knife, and is rather moist, although on the face of an arid hill. It is of a fine white, veined and spotted like the others, from which it undoubtedly derives its origin. It is called Khorī by the natives, and is used for that substance for instructing boys to write. Under this is the stratum most resembling Jasper from a mixture of colours in the ground. Still under that is an exceeding heavy dark red coloured stone, with veins and masses of quartz. I observed nothing below this. A little way north from the hill a mass of white quartz rises to the surface.

8th March —I went to Burhī Simar ⁽⁶⁶³⁾ Jomdho is a small market place, with some shops, most pleasantly situated on the Chandon, a very wide channel, with a small stream of clear water. It is a vast thoroughfare for pilgrims, both to Badyonath and Jogarnath, probably two hundred pass every day, many of them are most distressed objects, especially on their return, worn out with want and disease.

⁽⁶⁶¹⁾ Marked, but not named, on the S S

⁽⁶⁶²⁾ **Jataur.** See also under date 11th November 1810

⁽⁶⁶³⁾ **Bhorisimar,** on the Dakwari N, 9½ mi in a direct line S W of Jamdāhā.

About seven miles from Jomdoho I came to Sejuya, (664) a wretched village inhabited by Kol, who make iron. Their huts are very bad and they are miserably poor and dirty but they have sheds over their forges, which I saw nowhere else. Their features exactly like those of the hill people but much coarser. I went with them to visit their present mine. It is on a tolerably smooth piece of ground of a red soil, with rocks of quartz towards the west, and beyond these rocks of fine-grained granitel. The ore is in small grains found mixed with earth and pebbles in veins running under the surface, at the depth of three or four feet and from one to two feet wide and deep. It is wrought as I have before described, and such mines seem to be numerous. About two miles from Sejuya I came to the place where the Taljhor⁽⁶⁶⁵⁾ joins the Khurar and crossed the former torrent. Both are considerable channels, with much sand in their bottom but rocky banks and both contain small streams of clear water. Between Sejuya and these I had crossed a small dry torrent named the Gairajhor⁽⁶⁶⁶⁾. About four miles farther I came to the Taljhor again, and went a little way in the channel without crossing it my route continuing by its left bank for about a mile. I then crossed it, and went up about half a mile to Burhi Simar.

I did not examine every rock by the way, but noticed the following: 1st A fine grained black and white granitel quite solid but its mica disposed in layers. 2nd A fine-grained granite white quartz and felspar much black mica, perfectly sound but somewhat. The mica somewhat in layers parallel to 5th A bands entirely of quartz and felspar. 3rd A fine-granitel. 4th A stone in decay consisting with alternate lay silver mica, and black micaceous. In a state of decay. 6th Fine-grained black and lost most of its mica what decayed. 7th White granitel, as in the quartz. about 4 miles from Jamdoh, Buchanan
of the two substances. of the S.S.
in the channel of the Khur
granitel with much quart

quartz 8th A fine solid granitel of the same nature
 9th A similar stone in decay, and almost white, the greater part of the black micaceous matter having been washed out 10th A very minute-grained black and white granitel, evidently stratified Some of these aggregate stones were stratified, others not, which I look upon as a mere accidental circumstance The strata, of which I noticed the direction, ran about south-east and north-west This country, were it cultivated, exactly resembles Mysore, and might become still more valuable, as Maize seems to thrive everywhere The people complain of the want of water, and say that the country can only be occupied near torrents that afford water at all seasons They have not, however, attempted to make either wells or tanks I was here visited by two Babus of the family of Rup Narayon, who hold this part of the country of their kinsman, by Military tenure They are good-looking young men, but have no sort of equipage or state They complain of encroachments from the Ghatwals of Khadir Ali Bhuri Simar is a small village of cultivators and Kol The rock at it is a fine-grained granitel, black and white, and although in parallel layers, quite compact

9th March —I went almost seven coses to the banks of the Chandon, about $1\frac{1}{2}$ miles above a considerable village It was my intention to have halted at that place, but unfortunately it is new, and Chandon,⁽⁶⁶⁷⁾ where my tents were pitched, is almost deserted, which proved exceedingly inconvenient As I approach the sources of the torrents, of which I this day crossed twelve, they contain more water, as all, except the Sarpiya, contain water at all seasons, that is water may be found by digging a little into their sand. Most of them contain a small stream, or at least pools among the sand, but the water is seldom good, that procured by digging the sand is excellent The country is no doubt better cultivated than towards the south, where the torrents at this season are in

(667) **Chandan.** The considerable village "which was new" was apparently Nawādh (the 'new village'), about 1 mile S W of Chāndan

general quite dry, but wells or reservoirs would no doubt give a supply. The country is much less rocky, but in most parts contains many masses of white quartz among the soil, and the quartz in mass comes to the surface in many parts. The only rock that I examined was about $3\frac{1}{4}$ miles from Burhi Simar. It is a granite consisting of small grains of quartz, of black micaceous matter, and garnets.

About a quarter of a mile from Buri Simar crossed the Dhiba jhor,⁽⁶⁶⁸⁾ and at about an equal distance came to the junction of the Ardha⁽⁶⁶⁸⁾ and Taljhor, the former being nearest to me. About a quarter of a mile farther I crossed the Ardha, having ascended its right bank so far. At about an equal distance I came to a place where the Kol of Buri Simar extract iron ore from small pits, the ore here instead of earth is mixed with a white quartzose sand, which is the substratum under the soil in most parts of the vicinity. At about a similar distance crossed the Bola jhor,⁽⁶⁶⁸⁾ and about three quarters of a mile farther, the Kharwa jhor⁽⁶⁶⁸⁾. About $1\frac{3}{4}$ miles farther from a high situation I had a fine view of the lofty and rugged peak of Tiyr⁽⁶⁶⁹⁾ at a distance with two hills much nearer namely Ghutghuti⁽⁶⁷⁰⁾ towards the left of Tiyr and Bahengga⁽⁶⁷¹⁾ towards its left. About three quarters of a mile farther passed a similar iron mine. Rather less than two miles farther I crossed the Megha jhor⁽⁶⁷²⁾ which forms the boundary between Rup Narayon and the Ghatwals dependent on Khadir Ali. About three quarters of a mile farther crossed the Bhongra badar⁽⁶⁷³⁾ jhor deriving its appellation from a village of the same name. About three quarters of a mile farther I crossed the Khungtuya jhor,⁽⁶⁷⁴⁾ and two miles farther the Sarpiya jhor⁽⁶⁷²⁾ which is dry.

(668) None of these names are traceable on the S.S.

(669) Trikut or Tiyr Pahar

(670) Ghutghuti Pahar

(671) Name not found on the S.S.

(672) Not named on the S.S.

(673) A village Bhorabadar is marked on the S.S.

(674) A village Khutwa is marked on the S.S.

Less than a quarter of a mile from thence I came to the bank of the Chandon, which I ascended a little way to the mouth of the Belahariya jhor,⁽⁶⁷⁵⁾ which enters the left bank of the Chandon. I then crossed the latter obliquely, for a quarter of a mile, to the mouth of the Nima jhor,⁽⁶⁷²⁾ which enters from the right. I ascended this for rather more than a mile to Chandon village, at a little distance from the river, where the people have dug wells, and proceeded about as much more to the bank of the river above the village, where I found my tents.

I remained at Chandon two days, in order to give my Hindu followers an opportunity of visiting Baidyomath on the festival called Huli,⁽⁶⁷⁶⁾ which was this year celebrated on the 10th and 11th of March.

12th March.—I went to Karana⁽⁶⁷⁷⁾. Having crossed the Chandon, here considerably diminished, I left some low hills to my right, and about half a mile from Chandon crossed a torrent named Narabangk,⁽⁶⁷²⁾ at which the rock was a black and white granite, much decayed. About $1\frac{1}{2}$ mile from Chandon, crossed another torrent named the Dawa,⁽⁶⁷⁸⁾ and saw on my right another named the Bajauni dumar,⁽⁶⁷²⁾ which I did not cross. About $3\frac{1}{4}$ miles from Chandon crossed the torrent named Sirsiya ghat⁽⁶⁷²⁾. Between these two passed a fine village named Paharpur,⁽⁶⁷⁹⁾ but I did not enter its fields. About four miles from Chandon crossed the torrent named Baraghat,⁽⁶⁷²⁾ just above where it receives the Kasanti⁽⁶⁷²⁾. Between the Sirsiya and Baraghat has been a fine village deserted. I ascended the Kasanti for about a third of a mile, through the lands of Tiarper⁽⁶⁸⁰⁾ village, mostly deserted, and then crossed the torrent. About six miles from Chandon, came to Boroduyari⁽⁶⁷²⁾ hill,

⁽⁶⁷⁵⁾ A village **Belharla** is marked on the S S

⁽⁶⁷⁶⁾ The *Holi* festival, well known in northern India

⁽⁶⁷⁷⁾ **Karna**, $2\frac{1}{2}$ mi due E of Simultala Railway Station not **Karna** ($2\frac{1}{4}$ mi S W of Lababon block-hut)

⁽⁶⁷⁸⁾ **Dhawa** village is marked on the S S

⁽⁶⁷⁹⁾ **Paharpur**.

⁽⁶⁸⁰⁾ **Gadi Piarpheer**. The *T* in Buchanan's name is evidently a slip for *P*

which comes from the north east, and sends out a long rock towards the south west, in which direction the rocks, so far as I could observe to-day, seem to run, and they appear to be quite vertical. In the last-mentioned place until approaching the hills, the rock seems everywhere to be composed of fine grains of quartz, among which are some irregular black grains. Where the rock is living, the quartz is partly fat and white partly glassy but in many parts where the stone is dead it has become mealy. At the hill the same materials in larger grains, form a rock, in which the black matter is much more predominant, but certain parallel flakes contain comparatively little, and are almost white, while the others are of a dark grey. About seven miles from Chandon crossed the Asan ghatiya⁽⁶⁸¹⁾ torrent where the rock again is a rotten black and white granitel. About $7\frac{1}{2}$ miles I had Chupridanga⁽⁶⁸²⁾ a small hill east at a little distance. From thence to Karana is about $4\frac{1}{2}$ miles without anything remarkable.

The Tikayit here is an exceedingly stupid looking man and all his people seem to have very little knowledge of the regulations. One village he calls revenue land and all the rest he calls Jaghir and has divided it among his armed men, thinking that should he be deprived of his revenue land the other would be allowed to remain with him. The old military habits accordingly are kept up and the country neglected. In the territory belonging to his brother-in-law at Chandon all notion of military tenure is abandoned the country is more cultivated, and the huts are much better and much progress is made in the arts and in comfort. At Korana is no shop. I had to procure supplies from Tarapur and Chakal.

13th March — I went to Goramara⁽⁶⁸³⁾ in the midst of the forests of Ghidore distant rather more

(681) A village Asanghatia is marked on the S.S. 5 ml N.W. of Chandon.

(682) Not named on the S.S. It is impossible to trace Buchanan's exact route this day from the maps available.

(683) Ghormara, a hamlet by the side of the Ulai N. about 5 ml. W. of Simultala.

than twelve miles ⁽⁶⁸⁴⁾ Having crossed the Boruya, ⁽⁶⁸⁵⁾ which here contains a small stream, I went much westerly to a village of Ghatwals, more than a mile from Garana, very poor, and little cultivation. About two miles from Karana, having on the way crossed a dry torrent, I came to the first ridge of hills towards Karana. It consists of quartz very little mixed with mica, so far as I observed. About half a mile beyond these, in swelling and broken land between the first and second range of hills, I passed the Topkanī, ⁽⁶⁸⁶⁾ a torrent containing water in its channel. The rock here was in a state of decay, and disposed in thin strata, with a dip of between 30° and 40° towards the north-west. It consists of small grains of white quartz intermixed with still smaller of a black substance, evidently disposed in flakes parallel to the fissures, which last contain whitish mica. Here were many masses of white quartz running in a line west-south-west by north-north-east, between the strata of the decayed granitel. I think it formed a stratum, but without digging, could not be positive. It may have been a vein. Beyond this torrent is another wretched village of Ghatwals. Proceeding through lands that appear to have been once cultivated, between the first and second range of hills, I came to the Mon ⁽⁶⁸⁶⁾ river or torrent, a little less than five miles from Karana. This is a large channel containing a little water in some places, and winds through among the hills of the second range, which are small and detached. In less than half a mile in the passage among these hills I crossed it three times. I am told that Mon is not the name of the river, but of the ghat, and that I crossed two branches. On these hills also the rock is quartz with some admixture of mica. In the channel of the Mon, immediately beyond the hills the quartz and mica form an aggregate, which,

(684) As the crow flies, Ghormāra is about 7½ mi W of Kharna, but even now there is no road across, and the intervening country is very hilly. Buchanan must have followed a winding path. By Ghudore is meant the pargana of Gidhaur.

(685) Badua N.

(686) These names do not appear on the S.S., but it looks as if the "Mon" was the upper reach of the Ulaī.

which comes from the north-east, and sends out a long rock towards the south west, in which direction the rocks, so far as I could observe to-day, seem to run, and they appear to be quite vertical. In the last-mentioned place until approaching the hills, the rock seems everywhere to be composed of fine grains of quartz among which are some irregular black grains. Where the rock is living the quartz is partly fat and white partly glassy but in many parts where the stone is dead it has become mealy. At the hill the same materials, in larger grains, form a rock, in which the black matter is much more predominant, but certain parallel flakes contain comparatively little and are almost white, while the others are of a dark grey. About seven miles from Chandon crossed the Asan ghatiya⁽⁶⁸¹⁾ torrent where the rock again is a rotten black and white granitel. About $7\frac{1}{2}$ miles I had Chupridanga⁽⁶⁸²⁾ a small hill, east at a little distance. From thence to Karana is about $4\frac{1}{2}$ miles without anything remarkable.

The Tikayit here is an exceedingly stupid looking man, and all his people seem to have very little knowledge of the regulations. One village he calls revenue land and all the rest he calls Jaghir and has divided it among his armed men, thinking that should he be deprived of his revenue land, the other would be allowed to remain with him. The old military habits accordingly are kept up and the country neglected. In the territory belonging to his brother-in-law at Chandon all notion of military tenure is abandoned the country is more cultivated and the huts are much better and much progress is made in the arts and in comfort. At Korana is no shop. I had to procure supplies from Tarapur and Chakai.

15th March—I went to Goramara⁽⁶⁸³⁾ in the midst of the forests of Ghidore distant rather more

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(682) Not named on the S.B. It is impossible to trace Buchanan's exact route this day from the maps available.

(683) Ghormara, a hamlet by the side of the Ulai N., about 5 mi. W. Simultala.

than twelve miles ⁽⁶⁸⁴⁾ Having crossed the Boruya, ⁽⁶⁸⁵⁾ which here contains a small stream, I went much westerly to a village of Ghatwals, more than a mile from Garana, very poor, and little cultivation. About two miles from Karana, having on the way crossed a dry torrent, I came to the first ridge of hills towards Karana. It consists of quartz very little mixed with mica, so far as I observed. About half a mile beyond these, in swelling and broken land between the first and second range of hills, I passed the Topkani, ⁽⁶⁸⁶⁾ a torrent containing water in its channel. The rock here was in a state of decay, and disposed in thin strata, with a dip of between 30° and 40° towards the north-west. It consists of small grains of white quartz intermixed with still smaller of a black substance, evidently disposed in flakes parallel to the fissures, which last contain whitish mica. Here were many masses of white quartz running in a line west-south-west by north-north-east, between the strata of the decayed granite. I think it formed a stratum, but without digging, could not be positive. It may have been a vein. Beyond this torrent is another wretched village of Ghatwals. Proceeding through lands that appear to have been once cultivated, between the first and second range of hills, I came to the Mon ⁽⁶⁸⁶⁾ river or torrent, a little less than five miles from Karana. This is a large channel containing a little water in some places, and winds through among the hills of the second range, which are small and detached. In less than half a mile in the passage among these hills I crossed it three times. I am told that Mon is not the name of the river, but of the ghat, and that I crossed two branches. On these hills also the rock is quartz with some admixture of mica. In the channel of the Mon, immediately beyond the hills the quartz and mica form an aggregate, which,

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(685) Badua N.

(686) These names do not appear on the S.S., but it looks as if the "Mon" was the upper reach of the Ulai.

although disposed in vertical strata running east-north-east and west-south west, cannot be called shistose mica as the particles are disposed in all directions, and there is no appearance of shistose fracture. In some specimens the masses of mica are pretty large, and separate into thin plates, but too small for use. The mica has a silvery appearance, and both it and the quartz are white. Near this is a very fine stone, quite compact without any appearance of stratification. It is granitel consisting of large grains of black shorl with less white quartz disposed in very small grains quite irregularly. Beyond this second range there is no cultivation and the forests are much more stately. They consist chiefly of bamboos of a good size but many fine trees are intermixed. I continued going westerly along the north side of this range of hills for about three miles, having a ridge apparently higher towards my right. On leaving this part of the second range, which I believe is the extremity seen from Karana I went about half a mile to a hill on my right. This I believe is the end of the ridge I had seen in that direction, but am not certain. It consists of quartz and mica intermixed, like the others. In some parts to-day the quartz is pure in others one half of the aggregate is shining white mica in plates. From this hill I went through a broken rocky country for almost two miles. In the greater part if not the whole of this the rock is a granite, a few large masses white felspar much small grained quartz and a good deal of small black shorlaceous matter. The two latter disposed in irregular but parallel layers often waved the first scattered through the mass. In some parts it is in vertical strata west-south-west and east-north-east in others I saw vast masses without the smallest fissure. This led me to a range of hills connected with Gunda (687). The first, through which I passed south of Ghoramara is small extending about two-thirds of a mile in width and consisting as most of the others seen to-day of quartz intermixed with more or less mica. I then passed

(687) Apparently the Gado Pahar of the S.E.

over a fine swelling land of a good soil for about half a mile, and passed for about an equal distance down the banks of the Ulayi, on a fine level fit for rice, wheat, sugarcane, &c I halted on this, where it is very narrow, between the river and the hill called Kariya,⁽⁶⁸⁸⁾ which is one of the highest in the range, and may be two hundred and fifty feet in perpendicular height It consists of white quartz containing a little foliated silvery mica, irregularly disposed, and placed vertically west-south-west and east-north-east. As usual it is much shattered I am told that there is a place, about $1\frac{1}{2}$ cose east from this, called Abarak⁽⁶⁸⁸⁾ or Mica, but the people never heard that any of that substance was ever dug there Some of my people, however, on the road, about one cose from where we halted, found some plates, about three or four inches square, and of a good quality By a proper search good mica might probably be found On the opposite bank of the river is a smaller hill named Patpahari ⁽⁶⁸⁸⁾

14th March —I went to Gangra ⁽⁶⁸⁹⁾ Having crossed the Ulayi, which is about one hundred and twenty yards wide, and contains a greater stream than any of the hill torrents or rivers that I have seen, I passed over a part of the fine plain, and about a quarter of a mile on came to a pass called Harhar,⁽⁶⁹⁰⁾ where rocks come down, on both sides, to the very bank of the river, but its channel affords a very good road The rock is quartz and silver mica disposed in strata nearly vertical, of very various widths, but shattered into small pieces by transverse fissures Descending the river about a quarter of a mile, I returned to its right bank, down which I went for about $1\frac{1}{2}$ miles, when I crossed it again There is a small hill⁽⁶⁹¹⁾ on the left bank about half a mile above where I crossed Immediately beyond where I passed, were many scattered heaps like tumuli, but they were said to be

⁽⁶⁸⁸⁾ Not traceable on the S S

⁽⁶⁸⁹⁾ Gangra, 2 mi S E of Gidhaur

⁽⁶⁹⁰⁾ Not named on the S S, but it is clearly the narrow pass through the hills, about $6\frac{1}{2}$ mi W by N of Simultālā, through which the Ulay flows

⁽⁶⁹¹⁾ Evidently the Tumba Pahar of the S S.

the work of white ants This I think doubtful In the first place they were smooth and hemispherical and covered with grass showing no appearance of holes where cut and, secondly, their size was enormous being about twenty feet in diameter About $1\frac{1}{2}$ miles on I came to Mahapur,⁽⁶⁸²⁾ a very poor place in the Ghatwali style Rather more than a mile below that I recrossed the Ulayi, opposite to a hill called Mega,⁽⁶⁸³⁾ which is part of a chain running west from Gundu⁽⁶⁸⁴⁾ Gangra is about six miles farther on and is a well cultivated and planted village, as is another about half a mile before I reached it

On the banks of the Ulayi or Ular above $1\frac{1}{2}$ cose above where I halted last night at the foot of a hill is a rock of what is called Neruya or Leruya,⁽⁶⁸⁵⁾ a kind of white limestone I suppose it will admit of a marble polish as it is spathose It contains mica and must be considered as an aggregate The mass from which the specimen was taken is said to be about the size of a table about half a cose higher up the river at Keyal,⁽⁶⁸⁶⁾ are the concretions called gangot mixed with the soil

15th March —I went to Jamui⁽⁶⁸⁷⁾ through a very pretty country with many old-established and regular villages having fine plantations of Mango trees The houses pretty tolerable with bamboo walls and carefully concealed with fences of bamboos or branches The women much concealed I first crossed the ⁽⁶⁸⁸⁾ on which Gangra stands It is a small sandy channel with a stream of water I then proceeded rather less than five miles to the Ulayi which here is wider than farther up but most of its water is absorbed by the sand so that here it has no stream, but water may everywhere be had by digging On its left bank

(682) Mahapur

(683) Not named on the S.S.

(684) ? Cado Pahar see above (note 687)

(685) In the *Index of Native Words* the word is written सेरया : the term is unknown to me.

(686) Kewal 5 mi. S.W. of Simultali.

(687) Jamui now the headquarters of a subdivision.

(688) Blank in the MS. The Magi N is meant

I found some Gangot. About $2\frac{1}{2}$ miles beyond the Ulaī, I came to the Kiyul,⁽⁶⁹⁹⁾ a very wide channel, but still dryer than the Ulayī. It, however, contains plenty of water below the surface. At Jamui, the Rajas of Ghidor⁽⁷⁰⁰⁾ have their offices for collecting their rents. Both branches of the family reside at some distance and one of them in Ramghur,⁽⁷⁰¹⁾ but I was visited by the head of one branch, with his two sons and a brother; and by a brother and son and nephew of the head of the other, all very civil men, and some of them rather rational. The family is in a good deal of pecuniary difficulty, owing in some measure probably to the number of its members, and an unwillingness to the retrenchment which such a circumstance necessarily requires. They have fallen into arrears of revenue, and have been warned that their estate will be sold, but this, they say, is of little importance, having often before been in similar circumstances, and always been able to borrow money. They have dealt with one indigo planter, who in fact manages a part of their estate, which they say he has very much improved by extending the cultivation; but they look upon it as idle to lay out any money on such schemes.

16th March.—I went to visit two old forts. I first proceeded to Inderpe,⁽⁷⁰²⁾ which is rather less than three miles from Jamui. It is a work of considerable magnitude, and probably of considerable antiquity. It is a square surrounded by a strong rampart of brick, totally ruinous, and the ditch in many places obliterated; nor does the ditch appear ever to have been very wide. On the east face has

(699) **Kiul R.** Buchanan must have crossed the Ulaī N. near Thegua.

(700) 1 e of the Gidhaur and Khairā branches.

(701) The old Rāmgarh district, which adjoined *parganas* Gidhaur and Chakai on the south as will be seen from Rennell's *B A*, Pl VIII, and Sherwill's *Rev Sur* (1845—47) map.

(702) Now generally called Indpe, or Indpegarh. Buchanan's spelling is more in accord with the tradition that the site is called after Rāja Indradyumna (or Indardavan), the last Hindu ruler of western and southern Monghyr, who was driven out of the country at the time of the Muhammadan invasion about the end of the 12th century. See also *AS I*, III, 162, VIII, 120, *AS Ben Cir Report* for 1902-03, p 11.

been a gate without which, towards the north, has been a pretty large tank, and towards the south two large buildings that have been left heaps of bricks. Within this outer fort is a square citadel, not placed in the centre but near the eastern face of the outer wall. In the north-east corner of the space between the citadel and outer wall, are five heaps of bricks, two of which are of considerable size. In the south-east corner are two heaps of a large size that next the gate is said to have been a temple of Siva. Adjacent to the north face of the citadel is a small tank. Towards the west is a fine village, the cultivation and gardens of which conceal any ruins that may have been in that quarter of the city. I observed only one gate in the citadel defended as usual, by outworks. A little within this gate has been a large square building, which has probably been the Rajah's house. It communicates with the rampart of the south side of the citadel by a mound, which has probably been a fortified passage. East from this building is a very high conical mound with some brick walls on its summit. This is called the Chandni,⁽⁷⁰³⁾ or terrace, where the Raja sat to enjoy cool air in the evening but this seems somewhat doubtful for this is no doubt the chief and largest member of the whole work, and is more likely to have been a temple. There is an appearance of two small tanks to the north of these two last-mentioned buildings. This fort is said to have belonged to a Raja Inderdovon,⁽⁷⁰⁴⁾ a Rajput, who fled to Jaganath on the approach of the Muhammadans. The people do not think that this is the Inderdovon who built the great temple of that place but this seems doubtful. At any rate he must have

(703) *Okādnī* does not mean terrace. The original meaning is moonlight; then anything bright or shining; a white ceiling or awning. In *Shāhābād* the term is also applied to a house built of stone. The sense in which the term is used here is not clear: it may refer to the use of the elevated position for sitting out in the moonlight.

(704) *Indardavan* or *Indradyumna*. Up to date no inscription has been found to establish this ruler's identity. There is a Muhammadan tradition that he and his family were driven out by Saliyd warriors despatched eastwards by *Shihābū d dīn Ghori* and that they fled to *Vaidyanāth* (*Deoghar*) and *Jagannāth* (*Puri*).

been a considerable prince, and is said to have had another fortress⁽⁷⁰⁵⁾ in Behar

From this fortress to Gidor⁽⁷⁰⁶⁾ is not quite four miles, through a very fine country. By the way I passed a house⁽⁷⁰⁷⁾ of one of the Rajas, consisting of many good substantial huts, surrounded by a fence of bamboos interwoven. Ghidor is universally attributed to Shir Shah,⁽⁷⁰⁸⁾ and is an exceeding rude castle four hundred and seventy-four feet from north to south inside, by four hundred and forty-six feet from east to west. The walls at the doors are twenty-three or twenty-four feet thick at the bottom, and about seventeen at the top. In the middle, between the doors and the corners, the wall is seven feet narrower, as stairs of that thickness led up from the middle towards the angle on one hand, and towards the gate on the other, for there was a gate on each front. These eight weaker parts have been strengthened by semi-elliptical towers, except to the west side of the northern face on the left of the great gate, the outwork before which was probably considered as a sufficient security. The outwork is square, and the entrance into it is commanded by the tower on the right of the gate. There is also a tower at each angle of the fort. The towers do not appear to have been higher than the curtain, that is, between twenty-nine and thirty feet, exclusive of the parapet, of which few traces remain. It seems to have been exceedingly rude, without embrasures, and having only small openings for musketry or missile weapons. There is no trace of a ditch, nor are there any outworks before the smaller gates. The

(705) i.e. at Jainagar, near Lakhī Sarāi. See *ASI*, III, 159, Buchanan's *Patna-Gaya Journal* (ed. Jackson) pp. 82–86, *Gazetteer* (1926) pp. 218–219.

(706) i.e. Naulakhagāṛh fort, at **Kasba Gidhaur** (S.S.) usually ascribed in local tradition to Sher Shāh, but, as surmised by Buchanan (see below), the original fort was probably much older. For the late Dr. T. Bloch's views, see *AS*, *Ben. Cir.*, *Report* for 1902-03, p. 11. See also *Gazetteer* (1926), p. 250, where the dimensions stated differ from those given by Buchanan.

(707) i.e. at **Khaira**, from which one branch of the family still takes its name.

(708) Sher Shāh, see note (706) above.

great gate is called the elephant,⁽⁷⁰⁹⁾ and is a wide and lofty arch, with two arched recesses in the passage to serve as a guard room, and each capable of sheltering ten or twelve men. The east gate is called Mahadeva, and an image of Siva, in the usual form is in the immediate front of the passage. This also has arched recesses in the passage, but only fit to accommodate two or three guards. The south gate is called the Camel, and is of the same structure. The west gate is called the Horse and has probably been of the same structure, but it is very ruinous. The arches are of stone in the Gothic style. The walls are entirely built of rude uncut masses of quartz from the adjacent hill. The masses in general are not large and the larger are laid with their greater length outwards, whereas for strength the ends should have been exposed to the blow. The outer row without and within, is strengthened by mortar, but the inside is filled up with loose stones, mostly small and not built but thrown in without mortar. The unsightliness of the rude masonry was probably concealed by plaster at least some part remains entire near the southern gate, but it must always have had as miserable appearance, when compared with the castles of the barbarous chiefs of Europe in the fourteenth and fifteenth centuries as it is inferior to those rude but grand works in the means of defence. There is not the smallest trace of any building within and the garrison was probably lodged in huts. The supposition of this castle having been built by Sheer Shah or any Moslem, is exceedingly doubtful from the image of Siva at one of the gates. It probably however, may have been occupied by that prince during his struggles with Humayun for empire especially when the latter had joined the kings of Bengal. It appears also evident that the fort after having been in decay has been again repaired, some parts of the wall appearing to have fallen, and to have been rebuilt in a very hurried manner. Besides the

(709) Elephant gate, or *Adiāipour* (vulg. *Adiāipol*) a common feature of old palace forts of those at Delhi Agra, Māndū Gwalior Monghyr Rohitāgarh etc. (See *Manrique's Travels* Hakluyt Socy edn., Vol. II pp. 165—66) Camel and Horse gates are however only local names.

two smaller gates, that remain entire, have been narrowed by placing at each side the fragment of a column of cut granite, about eight feet high, and by placing another fragment of a similar column across the top of these, just where the arch begins to spring. That these are not contemporary with the fort is pretty clear. Had the architect been at leisure, he would have undoubtedly cut them into the form of a gateway, and have connected them with the building in the closest manner, in order to give additional strength. I strongly suspect that this was a stronghold of Inderdovon, to which he might retire as to a place of greater strength than his usual residence, and where he might keep up a communication with the fastnesses on the range of hills, which extends west from Ghor Ghidor to an unknown length. I presume that there are many gaps in it, at any rate, the hill next Ghidor is totally detached⁽⁷¹⁰⁾ from the one next adjacent. I am told that the natives have no general name for this range, nor no proper appellation for each of its component parts, but give the name of each village to the part that is nearest it. I had several fragments of the rock brought down from the hill, and find them exactly the same with the stones of the fort, which are quartz, in some places pure white and solid, but in most other consist of various aggregate particles, partly glassy, partly white, and more or less mixed with mica, but this is chiefly confined to fissures. The masses in general consist of many parallel strata conglutinated together, but others are of a uniform substance. In fact, this chain seems to consist of the same materials with that which extends west from

(710) Had Buchanan gone round the corner he would have seen that the hill was connected by a saddle with the higher range behind. He is correct in noting that there is no general name for this range, or rather series of ranges that extend westwards from Naulakhagarh for more than twenty miles into the Gaya district, and which have never as yet been accurately surveyed, or even completely explored. Though some of the more conspicuous hills have got distinctive names, Buchanan correctly observes that hills are usually called by the name of an adjoining village. This custom is observed all over south Bihār by the plains folk. On the other hand, the more aboriginal tribes, who frequent the hills to collect jungle produce or fire-wood or to graze their cattle, call the different hills by names unknown to the ordinary inhabitants of the plains villages.

Jetaurnath by Usla⁽⁷¹¹⁾ &c and it is said to join with the continuation of that chain which passes north from Chakayi⁽⁷¹²⁾

17th March —I went to Mallipur⁽⁷¹³⁾ through a fine country About three miles from Jamui I came to the Kiyul river, which here is a very wide channel at least five hundred yards across It contains a little water, but that is nearly stagnant Immediately south from the passage on the east side of the river is a woody hill named Kurwang⁽⁷¹⁴⁾ About half a mile from thence, I halted in a Mango grove on the bank of the Onjona⁽⁷¹⁵⁾ opposite to Mallipur

19th March —I went a little south to the west end of Katauna⁽⁷¹⁶⁾ hill to a place of worship where Ram is said to have dedicated a Linga to Siva The Linga is in the ruin of a small temple, is called Putoneswar or Pindeswor⁽⁷¹⁷⁾ but is probably of recent date There have been two small temples on the hill, but only the foundations remain Near and in them are lying several broken images and fragments of such as have been completely defaced I suspect that these were broken by the zealots who erected the Siva, as being heretical One is a small representation of the human feet like that near Bhagalpore and one

(711) For Jataur, see diary of 11th November Usla is marked by Rennell (*B. A.* Pl. II) in a position that corresponds more or less with that of the present Sadgrāmpur about 13 mi. S. by E. of Kharakpur The

Usla Ghat of Rennell seems to represent the gap through which the Baduk N flows through the northern range of hills; but Rennell's map is inaccurate in these parts which were not surveyed by his assistants. This name is a corruption of Wasila, the name of a *pargana* lying between *parganas* Parbatpārā (on the N) and Chāndan Katoria (on the S.) which is named in Toḍar Māl's roll as one of the *maḥals* of *sarkār* Munger and is transliterated as Osla in Jarrett's translation (*Āin-i Akbarī* II 154) On the 4 mi. to the inch map of the Bhāgalpur district compiled in the B. & O. Drawing Office will be seen marked as a village Kasba Wasila about 4 mi. south of Belhar Though no such name appears on the 1 mi. = 1 in. S.S. there is evidently still a *mauza* there preserving the old name of the *pargana*.

(712) Chakal

(713) Malepur

(714) The hill on the right bank of the Kiyul R. opposite village Khairwa.

(715) The Nakti W. of the S.S. but the united stream (of the Anjan and Nakti) is always known as the Anjan at this place.

(716) The little hill near Katauna.

(717) Pataneśvara, or Pipdeśvara.

appears to me to be a Bouddh or Jain in Nirban,⁽⁷¹⁸⁾ inspiring two avatars below, who are sitting above the heads of the people, two others are totally entire, but I do not know what they represent. The rock at the top of the hill is of a kind I have never seen before. It consists of a red silicious matter, intermixed in a sub-shistose manner with white quartz, and besides, contains large veins of that substance. It appears to be stratified, and the strata seems to run east and west. At the foot of the hill the rock has no appearance of stratification, and consists of the same reddish matter, more compact, with various substances embedded in it, and containing many cavities, the surface of which are curiously frosted, as it were, with minute crystallisations. I had specimens of the same red substance brought me from other parts of the hill, variously intermixed with quartz, and of various degrees of compactness. The view from this hill uncommonly fine.

20th March —I went about $9\frac{1}{4}$ miles to Gordi⁽⁷¹⁹⁾. Mallipur is a large irregular village chiefly occupied by Bheparis,⁽⁷²⁰⁾ and finely situated on the right bank of the Onjon. This is a pretty wide sandy channel, which at all seasons affords water. That on the surface of the sand, or that even has been exposed in the little wells for a few hours, is turbid and bad. Every woman therefore digs a little cavity, about a foot deep, throws away the first water that rises, and then fills her pitcher with a small cup. About $2\frac{3}{4}$ miles from the garden, where I had halted, I crossed the Onjon again, as it comes from the north. It is there a narrow deep channel, with a little dirty water, between high banks of clay. About a quarter of a mile farther on, I came to the south side of Dunsir⁽⁷²¹⁾ (called to me Gundaauriya) hill, where I found the rock to be a mealy

(718) i.e. *nirvāna* (the figure being in a recumbent position)

(719) **Gordih**, locally pronounced Guddih, 9 mi. E by N from Malepur, on the high road to Kharakpur

(720) i.e. *bepāri* (Sans. *vyāpārīn*), a 'trader', generally applied to the travelling trader who transports grain or goods by pack bullock or cart.

(721) **Dhansir Hill**. The correct local name is Dhansir.

reddish quartz, much intersected by fissures but showing no very decided marks of stratification. About a mile farther, I passed another hill, called to me Dunsir, but its real name Parara ⁽⁷²²⁾. About four fifths of a mile farther crossed a small dry torrent named Korwa, beyond which was a fine village, ⁽⁷²³⁾ but the houses very poor. About seven miles from Mallipur crossed another small dry torrent named Bojher ⁽⁷²⁴⁾. Rather less than nine miles from the same place, I passed the Kaseyi, a small river, rather less than Onjon, and like it, where crossed last, confined between high banks of clay. Many small calcareous concretions by the way.

In the grove where I halted, near Mallipur were many Hanumans and some Morkots ⁽⁷²⁵⁾. I also heard the Hannumans by the way, which is natural enough, as the Hannuman deity is supposed to have been the son of the nymph Onjon by the God of the winds. Except the two small hills mentioned above, the country between Mallipur and Gordi is flat. Gordi is a poor village on a rocky eminence, with, however, a good deal of cultivation round it. No hills are visible from thence towards the east, and none towards the south are near.

21st March—The rock at Gordi is a reddish powdery quartz, in a state of decay, approaching to the shistose. On my way to the village called Bhimbān, ⁽⁷²⁶⁾ distant about $5\frac{1}{2}$ miles, I first, for about four miles passed over a swelling country, in which many large rocks of the same reddish powdery quartz project from the surface as rugged as granite, and without the smallest appearance of stratification. Two of these are so large as to have obtained names, Seraunchi and Dudanta the former one mile, the

⁽⁷²²⁾ The smaller hill to the S.E. of Dhanir

⁽⁷²³⁾ Bishunpur

⁽⁷²⁴⁾ The Kalwar N. of the S.E. The other two streams are not named on the S.E.

⁽⁷²⁵⁾ The *laxmā* is the *langūr* or Hanuman Monkey. *Semnopithecus entellus* the *markat* is the Bengal monkey *Macacus rhesus* Hanumat (Hanuman) was supposed to be a son of Anjanā by the wind god Vāy.

⁽⁷²⁶⁾ Bhimbān. The correct name is Bhimbāndh; a beautiful site; in fact the whole vicinity of these springs is most attractive.

latter almost two miles from Gordi. The quartz of Seraunchi is exactly similar to what I collected yesterday. Not quite four miles from Gordi, in a north-east direction, I came to a place of ravines and broken ground, at the foot of Manik Than,⁽⁷²⁷⁾ which forms the south-east extremity of a chain of hills running north and east from Mallipur. The rock of this hill is exceedingly rugged, without any appearance of strata, and consists of a powdery quartz, inclined to be livid, with layers of white quartz interspersed and many reddish minute points like garnet in a state of decay. The same broken ground continues until approaching the village of Bhimban, with a low country towards the east, bounded at no great distance by the hills south-west of Korukpur. In this space I crossed the Adwara,⁽⁷²⁷⁾ a dry torrent, about $4\frac{1}{2}$ miles from Gordi. Bimban contains a few wretched huts with few fields. About a quarter of a mile from these huts, I came to the Mon,⁽⁷²⁸⁾ containing a dirty stream with pools full of fish, and steep rocky banks as at Haha⁽⁷²⁹⁾. Beyond it the road crosses three fine little streams of limpid hot water, all within one mile of the village of Bhimban, and all arising from the east side of a rocky hill, at a little distance west from the road. Here I halted to examine the warm sources, which at the road rose to 114° Fahrenheit, and was disagreeably hot to the feeling, the thermometer in the sun being then at 74° . The water at each place issues from various crevices in the rock, and from under loose blocks, is quite clear and tasteless, and flows in very considerable quantity. I have nowhere in India seen such fine springs,⁽⁷³⁰⁾ except in Nepal, and I think, that the third stream surpasses even Bari Nilkhant,⁽⁷³¹⁾ the finest in that country. The water

(727) Not named on the S S

(728) The Man river, here incorrectly marked **Main N.** on the S S

(729) At the waterfall of this name described above, under date 2nd March

(730) Captain S R Sherwill recorded on the 5th September 1847 a temperature of 147° , and Colonel L A Waddell recorded $146^{\circ} 2$ in 1890. Mr V H Jackson recorded temperatures of 148° to $148^{\circ} 8$ in the Mahadeva group of springs between the years 1912 and 1919.

(731) See *An Account of the Kingdom of Nepal*, etc., 1819, pp 192—94, 141—42, 308.

as it issues was in general about 144° , but the thermometer thrust under the stones especially where air bubbles arose rose to 150° . The rivulets are filled with the green conferva usual in springs which adhered to the stones and in some places these are covered with a green ulva⁽⁷³²⁾ or tremella⁽⁷³³⁾ consisting of gelatinous masses, about the size of a filbert and adhering by fibrous roots. The water is evidently impregnated with stony matter, which on contact with the air is deposited in a crust like Gangot which covers the adjacent stones. This is only found near the very hottest parts where the water issues and its quantity is very small notwithstanding that the deposition has been probably going on for ages. The stones and earth near the springs are hot but the heat is quite tolerable to the hand, and far inferior to that of the water and seems to be merely communicated to them by the water which probably receives its heat in the interior of the mountain. The rock from which the first stream issues, is a kind of brownish livid quartz or petrosilex, not quite either one or [the] other. It has no appearance of stratification. The rock from which the second and part of the third stream issue are near latter rises from two collections of springs. *March* — The considerable distance from each other by quartz in a stratum of vertical strata running the schistose. On my way consist of parallel layers of basalt⁽⁷²⁶⁾ distant about $5\frac{1}{2}$ miles various thicknesses, miles, passed over a swelling stratum of white quartz, large rocks of the same reddish as the livid brownish project from the surface, as rugged however separated without the smallest appearance. The rock at Two of these are so large as to have which forms Seraunchi and Dudanta the former still however

(732) The smaller hill to the SE. of Dhanpur

(733) Bishunpur

(724) The Kairwar N. of the S.S. The other two nearance The on the S.S.

(725) The *Acanthaceae* is the *langur* or *Hanumat* *pithecus entellus* the market is the Bengal monkey. *Hanumat* (*Hanuman*) was supposed to be a son of Anja. Green Algae group *Vaya*

(726) Bhimbhand. The correct name is Bhimbhanding to the class in fact the whole vicinity of these springs is most attractive

Bhimban, is of a similar nature with this last, but is intermixed with a black powdery matter, in some parts interspersed in irregular clots, in others disposed in alternate layers. Returning to the Mon to inspect the strata, I found that its water also was somewhat hotter than the atmosphere. The thermometer in the sun had now risen to 76° , and in the Mon it rose to about 82° . In one place I observed air bubbles rising from the bottom, and found that the thermometer there rose to 98° . The rocks on the steep banks of the Mon are vertical, and consist of vertical layers like those of wood, but have an obscure appearance of running in strata, east and west. In some places they have become quite shistose, and may be scratched with the nail, but in others they are still very hard, and retain enough of their primitive character to show that they were once like the stone between the second and third sources above mentioned. In fact the stones here have no more stratification, when alive, than granite has, but, as they decay, they assume an appearance of strata and even of shistose structure. Near the sources I observed the calcareous tufa called Gangot, on the surface, and on the left bank of the third torrent it is dug from the earth for the purpose of making lime.

From Bhimban village to Molinpahar,⁽⁷³⁴⁾ my road led through a narrow and uneven valley, towards the west, for about $6\frac{1}{4}$ miles. At the end of the first mile,

(734) Buchanan gives the name of the hill also to the little hamlet of Naiyās at its foot. The hill described in the *Gazetteer* (1926) as Malnīpahār is not marked on any of the maps. It would appear to be the hill, marked as being 1422 ft above s l, to the north of the hamlet **Bhorbhandari** on the S S, but it may be that marked **Bhor Bharari** (1402), which is further from the hot springs. The site of these springs, in importance second only to those at Bhimbāndh, is not marked on the S S. They lie about $1\frac{1}{4}$ mi W by N from Bhorbhandari, the "Bhoondh Bhuraree" of S R Sherwill, a name which doubtless represents *bhur bhandāri*, the little store house (*bhandāri*) of 'springs' (*bhur*). The word *bhur* in some of the local dialects is pronounced *bhūr*, hence Sherwill's spelling. The springs are now known as Janam Kund, the 'birth' or 'source pool'. For the fullest description of these springs, see the late Mr V H Jackson's account in the *Patna College Magazine*, Vol III, pp 54—58. In October 1909 Jackson registered a temperature of 149° Fahr in these springs, i e higher than in any of this Bhimbāndh springs (which he had previously visited).

as I have said, is the third⁽⁷³⁵⁾ warm stream, which even at this season, would turn a small corn mill. This would form fine baths but I suspect that, without cultivation, the situation would be unhealthy. About 1 4/5 mile further, I came to a dry torrent named the Kimjol. About 1 1/5 mile farther I came to the highest and narrowest part of the valley, where there is a narrow pass called Maudondi, between two hills Chamra and Gopurna⁽⁷³⁶⁾. The rock there is very hard with an imperfect conchoidal fracture and consists of very fine grains, mostly of a bluish black, but interspersed with some that are white, which gives it a grey colour. It has no appearance of stratification. A dry torrent descends also towards the west from this pass and about 1 1/2 mile from it I crossed the Onjon here a fine little clear stream about 4/5 of a mile farther on I recrossed the Onjon where its water is somewhat warm and halted near Malinpahar a little from its bank. Malinpahar consists of a few huts occupied by Neyas who have a few fields, but live chiefly by burning lime cutting timber and collecting damar⁽⁷³⁷⁾. Lohita⁽⁷³⁸⁾ the nearest village towards the north, is eight cosses distant. Maroh⁽⁷³⁹⁾ on the right of the road at some distance. Kadera⁽⁷⁴⁰⁾ the nearest village to the west is six or seven cosses distant some hills between.

22nd March — I went first about 1 1/2 mile to see the source of the Unjon which consists of copious springs of hot water exactly like those I saw yesterday which unite to form a stream not so large as the one farthest from Bhimban, but finer than the other two. It issues from the root of Malinpahar where a space of

(735) Apparently the northernmost of the three springs marked on the S.S.

(736) Neither this nor any of the three preceding names appear on the S.S.

(737) Resin. See p. 26, above, Note 104.

(738) Laheta about 4 ml. S. of Dharhara.

(739) Mārak, a conspicuous flat-topped hill (1523 ft.) 6 1/2 ml. NW of Kharakpur that dominates the northern ranges of the Kharakpur hills it is the second highest hill in the whole group. Incorrectly marked as Maiba on the S.S.

(740) There is no village of this name on the west side of the hills. Possibly Kaira, some 2 ml. SW of Uren, is meant.

perhaps twenty yards in length, and twenty feet in width, is covered with fragments of rock, and the water may be heard running under these, and in some places seen through crevices, until it comes to the outer side and unites in little streams that soon join. At sunrise, the thermometer in the sun being at 62° , on being laid on these stones, it rose to 80° , and on being immersed in the water, it rose [to] 146° , but where the finest spring is, and the water issues immediately from the foot of the hill, without running any way under the stones, and is accompanied by many air bubbles, the thermometer arises to 150° ⁽⁷⁴¹⁾ The stone from among which the water issues, is a kind of intermedium between petrosilex and quartz of a horny colour, with some tinge of red. A little higher up the hill it is whiter, and has a more powdery appearance, as was also the case at Bhimban. In neither is there the smallest appearance of stratification. On the stones, where the water issues, is a very small quantity of tophaceous⁽⁷⁴²⁾ matter, but still less than at Bhimban.

About twenty yards from the hot springs, and nearly on the same level, is a place where the natives dig Osorhur,⁽⁷⁴³⁾ for making lime. It is found in a stratum about a foot thick, and about as much under the surface, but the natives mangle the ground so much

(741) In September 1847 S. R. Sherwill recorded 145° . In October 1909 V. H. Jackson recorded 149° , and on the 16th March 1910, that is, at the same time of year as Buchanan, but 99 years later, he recorded $147^{\circ} 2'$, or 28° degrees less than Buchanan's temperature. In this connexion Mr. Jackson wrote

"a reference to Buchanan Hamilton's account suggests that at the time of my visit the springs were unusually low, on account of the scanty rainfall in 1907 and 1908. This, as shall show later on, would make the temperature abnormally low, so that I am inclined to think that, though the springs have certainly cooled since Buchanan Hamilton saw them, the cooling has not been as much as 28° degrees."

I may add perhaps that the late Mr. Jackson once informed me that, as a result of repeated temperature tests made by him in the course of some twenty years at numerous hot springs in South Bihār that had been visited by Buchanan, he was inclined to think that Buchanan's thermometer had probably read about one degree too high, which might have been due to the age of the instrument or to inaccurate graduation or to a combination of both these causes.

(742) i.e. consisting of tufa

(743) See note (658) above, under date 7th March, and particularly note (747) below

in working it that its extent or dimensions are not easily ascertained. Over it are fragments of the same rock exactly as that at the hot springs under it are fragments of the same to the surface of which it adheres. On digging out one of these, I perceived that it was warm and the thermometer thrust into the cavity that was formed rose to 90. This, I think, will show that the water, although heated in the interior of the mountain, derives its temperature from gases, coming from below for the quarry of Osohor, *being pervious for these gases, receives a portion of heat although it is quite dry.* The Osohor of this place is a very porous calcareous tufa. I then returned to the tents. This upper part of the valley of the Onjon is finely watered, as between the village and the warm springs, the north hill sends six fine cold springs to join the Onjon. I know not how many join it from the south but at the houses it contains a very pretty stream and still retains some heat, although thus increased by cool water. Having crossed the Onjon at my tents, I proceeded south through a narrow valley which it waters. About half a mile from the Onjon I crossed a small running stream. About $3\frac{1}{4}$ miles from Malinpahar I crossed the Onjon again. Its banks here are very high and consist of red clay. The water here is dirty. A little beyond them are three or four huts⁽⁷⁴⁴⁾ of Neyas with some tolerable timbers near them, ready for exportation. About $4\frac{1}{2}$ miles from Molinpahar, I passed a dry torrent called the Darhaya⁽⁷⁴⁵⁾. Five miles from Molinpahar [I] recrossed the Onjon, where it seems enlarged and has a rapid course among stones. About a mile farther I came to another dry torrent, which was filled with fragments of stones from the south-east end of the rugged hills on the right named Siuri⁽⁷⁴⁶⁾. They consist of small grains of dark glassy quartz with ^{the} ~~the~~ white intermixed. The hill on the right is one ^{is the} ~~is the~~ most rugged that I have ever seen. It is a mere

⁽⁷⁴⁴⁾ Th. Possibly Kairbably the site of the present village of Gurmahā.

q. M. of S.S.

ned on the S.S.

lump of broken rocks with a few stunted trees issuing from among the fissures. It has no appearance of stratification. On the left, although not so rugged, there are some high abrupt rocks, that put on the appearance of vertical strata truncated at right angles towards the west, which gives them somewhat of a columnar appearance. So far from its source the valley of the Onjon is of a deep red clay, and contains much land fit for the plough. Beyond the torrent, my course lay more towards the right, over very uneven gravelly ground, which continued to Asurni,⁽⁷⁴⁷⁾ about $3\frac{1}{4}$ miles. On the whole, I reckon Asurni from Molinpahar village about $9\frac{1}{2}$ miles. There are at present no inhabitants at Asurni, but some sheds remain, that were occupied by the workmen employed by Mr Christian⁽⁷⁴⁸⁾ to dig and burn the Osohor for which purpose

(747) **Asurni.** Many sites in the hilly parts of South Bihār are associated in tradition with the ancient Asuras. Here we have also the tradition of their gigantic bones being found in fossilized condition. The idea of such calcareous tufa being the fossilized bones of giants is not confined to the Kharakpur hills. Buchanan records the use of the name in other places. Markham Kitter, in his account of a journey through the Forests of Orissa, published in *J A S B*, 1839 (p. 477), describes how he went to see the falls on the Jurritoora river, where he was told there were many "*Assura ka hār*", or giant's bones, "a denomination generally applied to fossils". He found that the said bones were "nothing more than large masses of stalactite in which were fantastic caves".

In *J A S B*, 1835 (p. 707 f) Captain H. Tanner, in an article strangely entitled *Note on the Asurhār of the Rajmahāl Hills*, describes a visit to this very place Asurni in November 1819, when he encamped for 12 days in the valley. He had heard "from natives that Captain (later General) Garstin had procured lime from that place to build the Government Granary at Patna". He found men who had actually worked for Garstin and later for the Mr Christian to whom Buchanan refers "I found", he writes, "a superior sort of tufa at various places in the valley, and remarked that each lump formed invariably, as if from percolation, round the roots of the *sal-hur* tree, thickest near the tree and thin towards the edges, and in many places extending along the thin roots, assuming a cylindrical form, but not perfectly round. These were also called *asurhār*".

"The lime from this species of tufa was considered so good, that the Superintendent wished for a large quantity, for the purpose of white washing, but the cost of transit across the hills was too great."

The Government Granary referred to here is none other than the "Gola" at Bānkīpur, which was built by (then) Captain John Garstin in 1784-86. Buchanan's Reports (or Journals) not having been published, it is possible that Tanner was unaware of Buchanan's examination of the site, only 8 years previously.

(748) From the Report we learn that this Mr Christian was a Polish Merchant of Monghyr. In the *East India Register* for 1810 he is described as "John Christian, Trader, Monghyr", and in the 1811 and subsequent volumes as an "indigo manufacturer, Monghyr", where he had first settled in 1791.

they had erected several kilns. The work has of late been given up, it is said on account of the deficiency of material. This branch of the valley running up from the valley of the Onjon by a cul de sac towards the west terminates a little beyond the huts, which stand on a rising ground in the middle of this recess. A torrent passes down each side and in the channel of that towards the south is a scanty spring which at all seasons gives some water. The Osohor was found on the surface of the mountain bounding the recess on the south extending down to the bottom, and up the side of the hill from ten to forty yards, and perhaps fifty or sixty yards in length. Like that at Mollin-pahar it seems to have formed a crust from two to three feet thick, and covered with a mass of soil and stones from one to two feet thick. Most part has been removed but some masses remain, which are too much intermixed with fragments of stone, or too much soiled by earthy matter to be worth the working. I saw no solid rock near the quarry but the fragments on the surface those intermixed with the Osohor and those under it some of which are large are all of a dark-coloured petrosilex, inclined to quartz. The fragments enveloped by the Osohor, are of various sizes from that of the head to that of a walnut. The Osohor does not adhere very firmly to them so that in breaking a mass they usually separate but they are completely involved in its substance. In the other places I observed no appearance of animal exuviae but here I found a few shells all of one kind involved in the tufa, which is very porous but hard. I also saw some appearances that seem to justify the appellation of tyrants bones⁽⁷⁴⁹⁾. One piece which I procured having very much the appearance of a flat bone, with a process at one end. One impression was also curious. It was a semi-cylinder about three inches in diameter and eighteen inches long not quite straight and

(749) Such appearances account for the tradition preserved in the name. *Asura* had always been interpreted as demon evil spirit etc. but it is now being realized that these so-called demons were a highly cultured people of ancient and prehistoric times. Tradition frequently ascribes to them supernatural powers, and also supernatural size.

exposed to the air, as if, by breaking away the rock, the other side of the cylinder had been carried away. This I consider as an impression. The inner smooth side of the cavity was wrinkled with transverse folds, like the inside of an intestine, but may have been possibly the bark of a tree, although I have seen no bark with such transverse wrinkles. I rather take it to have been some marine animal. I could only break this off in fragments, but the one that I have taken is sufficient to show the structure.

23rd March —I returned to Mallipur not quite nine miles. Rather more than a mile from the sheds, where I halted, I came to the Onjon and crossed it. Near the river there is some good land with a red soil. Descending the left bank about half a mile, I came to a narrow gap between two rocky hills through which the Onjon passes. This gap is exceedingly narrow and broken, and continues rather less than half a mile, during which I crossed the Onjon. The rock on the left is most alive, and is a horn-coloured petrosilex with a tinge of red. It has no appearance of strata, but its masses in some parts are striated vertically. On the right of the pass the rock is far advanced in decay, and has acquired a white powdery nature, while the strata are more distinct and form it into an appearance somewhat resembling logs of fibrous wood. These are nearly vertical, separated by fissures running north and south, which gives the south end of the hill, where it is abrupt, the appearance of columns two or three feet wide, but it is also cut by fissures nearly horizontal and distant about six to eight feet. The great masses intersected by these larger fissures, are again subdivided by others, that are parallel and that are seen when the masses are struck with a hammer, as will appear from the specimens. I now proceeded through a very narrow broken valley for about $1\frac{1}{2}$ miles, crossing the Onjon four times. The next mile was through a wider valley, but still very rough, and in this I crossed the Onjon again. Having now cleared the hills, I went about $1\frac{1}{2}$ mile on swelling land of a red soil, broken by ravines. From thence to the Onjon

at Mallipur, is not quite $3\frac{1}{2}$ miles on smooth land. The road all the way from Malinpahar is practicable with the small sogor,⁽⁷⁵⁰⁾ but is very bad. From Molinpahar to Bhimban and from thence to Mallipur is tolerable.

24th March — I went to the Indigo factory at Butarampur⁽⁷⁵¹⁾ about ten miles. Having crossed to the Thanah, about a mile south⁽⁷⁵²⁾ from thence, I crossed a torrent by means of an old brick bridge. About $3\frac{1}{2}$ miles from the Thanah, I crossed the Kiyul to Behar⁽⁷⁵³⁾, and passed through it for about two miles. It is considerably better cultivated than Chandon and Buka⁽⁷⁵⁴⁾ which are on the Bhagalpur side of the river, to which Korokpur does not approach. I crossed the Kiyul again and proceeded through Chandon and Buka about $4\frac{1}{2}$ miles to my tents. Here, I was met by Elias a Maronite of Aleppo who manages affairs for Mr. Christian, and for his female friend. He complains much of the raiats, on the score of sloth, and disinclination to pay, but he says that they are very ill treated by the zamindars, who totally disregard all agreements, and always squeeze as much as they can. When Chandon and Buka came under Mr. Christian, it was almost entirely waste. The soil is exceedingly productive. He works one hundred ploughs, and makes but little advances. He usually gets four mans of seed a biga, last year sold it at twelve rupees a man. He gave me some crystallised specimens of Osohor, from Asorn, which do not resemble any calcareous spar, that I have seen.

(750) The *sogor* (also *soggar* and *sogark*) is a small, low built country cart generally used in the hill areas. The typical *sogor*, *gari*, for use on rough, rocky tracks in the jungle, has very small, solid wheels.

(751) Batta and Hampur two separate villages, about 1 mi. SW of Mananpur Railway Station.

(752) For south here we should read west. The torrent is the Vagdhur of Buchanan's map not named on the S.S.

(753) i.e. the old district of Bihār which in Buchanan's time included the Bisthasāri *pargana*, the Kiyul R. forming the boundary from this point almost to its mouth, i.e. to near Nawābganj.

(754) i.e. the Chāndanbhūka *pargana*. Whether there were originally two separate tracts or whether the name was given to distinguish this *pargana* from that of Chāndan Katoria (further east) I can not say. It included the area on the west of the Kharakpur hills between them and the Kiyul R. from near Malspur up to Ghosikunḍi. The name does not occur in Toḍar Mal's list of *maḥals*.

25th March —I went to Surjagorra⁽⁷⁵⁵⁾ about 15½ miles. About four miles from Batarampur, I came to a large torrent, very deep in the soil. It is named Moruya,⁽⁷⁵⁶⁾ and does not appear to contain any water. About 4½ miles from Batarampur, I came to the south end of a considerable hill⁽⁷⁵⁷⁾ on my left. It is uncommonly smooth, and I did not see a stone or rock on it within reach. It extends more than two-thirds of a mile to the north, where a narrow rugged low ridge approaches near it from the east; but between, there is a considerable level of good soil, not in the least broken. The rock on the rugged ridge is a horn-coloured petrosilex, stained with red and vertically striated, exactly as in the pass on the Onjon near Asornu. From this pass to the boundary of Buka Perganah and of Thanah Mallipur, is about 1½ miles. From thence I went along a fine level for about 2½ miles, when I came to a steep bank, to which in the rainy season boats come to take in a load. I went from thence almost 2½ miles to Alinogor,⁽⁷⁵⁸⁾ the road leading along the bank. On my right, a fine level country, with beautiful groves of mangoes, and a few palmiras; on my left, a low bare country, but which looked well, being one uninterrupted sheet of wheat and barley, now ripe, as far as the eye could see. Alinogor is an invalid Thanah, with a wretched bungalow, built by Colonel Hutchinson. The invalids very thankful, but the widows and heirs do not like the new assessment.

I halted at the bungalow all day, to avoid the heat, which in the day is now intense, and in the evening went to Surajgorra. My road led along the same bank for about 3½ miles, with a similar country on either side. Near Alinogor, I had on my left a large piece of shallow stagnant water. About two miles from

⁽⁷⁵⁵⁾ **Surajgarha.**

⁽⁷⁵⁶⁾ **Murvea**, also **Morwe**.

⁽⁷⁷⁵⁾ Not named on any of the maps, but if I remember aright, it is known as Bhuinkā pahār, from a village of that name near by. It is a conspicuous landmark at the north-west corner of the Kharakpur hills, standing apart therefrom.

⁽⁷⁵⁸⁾ **Alinagar.**

the same place I came to a large channel⁽⁷⁵⁹⁾ containing stagnant water in pools, and called the Gundri. It comes from the south and here joins a small branch of the Ganges which comes through the middle of the fine wheat fields and contains a small stream, in which I saw people fishing by merely groping with hands. I descended along this branch with its rejunction with the great Ganges for about a mile, passing through Jukurpura, the chief gunj in Surjagorra and then went about a mile to a fine grove in which my tents were pitched.

28th March —I went down the river about three miles to see the ruins of Abkil⁽⁷⁶⁰⁾. I found nothing except one very small poor mosque of brick. It is said that the situation of the town has almost entirely been swept away by the river.

29th March —I went south into Korokpur with an intention of viewing a fine spring⁽⁷⁶¹⁾ which I understood was about four coses from Surajagorra at the foot of the northern face of the hills. I first proceeded through a beautiful plain for about 1½ miles to the bank of the same old channel that on the 25th was called Gundri but which to-day was called Gorkai⁽⁷⁵⁹⁾ and having proceeded up its channel about

(759) *Garkhe N.* At one time the Ganges flowed in a more southerly channel in this vicinity as may also be inferred from the trend of the Dewā, the Harohar and the lowest reaches of the Kūl and Morwa. From Saidpura, near Alinagar to the hills may still be seen the remains of a very old embankment, some four miles in length probably the remnant of a line of fortification and very likely indicating the position of the earthen embankment or entrenchment thrown up by Sher Shāh in his war with the King of Bengal (1533-34). See Abbās Khān's account in Elliot, *H. of I.* IV 330-43; Nī'amat-ullāh's account in Dorn, *Hist. of the Afghans* Pt. I 98-99; *Abbānāma* trans. by Beveridge I 328. Adil Shāh, the last of the Sur emperors was also defeated near here by Sulaimān and Bahādur in 1557. There used to be a village called Faizpur (the town of victory) close to Nawābganj (north thereof) which appears to have been diluviated by the Ganges in the last century; but it is still shown as a permanently settled estate (Tausi No. 639) in the Moughyr Collectorate records (I am indebted for this information to M. Shāh Muhammad Bashir S.D.O.) This name probably preserved the memory of one of these victories.

(760) Abgil Chak

(761) Buchanan started with the intention of examining the Sringi Rikh springs for a description of which see the *Patna College Magazine*, October 1909 and January 1910 and the *Gazetteer* (1926) p. 252.

half a mile, crossed to its west side. It is wide and deep, and contains a good deal of water in pools, but in some places is dry. About $3\frac{1}{2}$ miles from Surjagorra came to the boundary of Korokpur,⁽⁷⁶²⁾ which here projects far to the south. This estate has never been planted with fine groves, like Surjagorra, and is now almost entirely waste, whereas Surjagorra is like a garden. The greater part of Korokpur is fit for transplanted rice, and has been once cultivated with that grain. It is now almost entirely deserted, except by a few wretched Musahors, who skulk among the woods at the foot of the hills. I took one as a guide, and, on his leaving the village, his wife and children set up a howl, as if they had parted for ever. He was the most stupid creature I ever met, and could not tell the name of any one hill or tree. About $5\frac{1}{2}$ miles from the boundary, I came to the south side of a long hill⁽⁷⁶³⁾ on my left, and proceeded for about a mile along its west end, when I came to the place where it is joined by a lower hill from the west. This being very near five coses from my tents, I expected that I had come to the end of my journey, and ascended the hill on foot, it being too steep and rocky for any other conveyance. On the first part of the ascent, the rock is a very dark grey petrosilex, with a good deal of the conchoidal fracture, and many veins of white fat quartz, some eighteen inches wide, and not separated by fissures from the petrosilex. Farther up, the rock is in a state of decay, but retains the same fracture. It is of a white powdery substance intermixed with brown dust, partly in irregular spots, partly in parallel layers. This is a most decided step towards the khori of Gheruya, 7th March. At the summit the rock is a very light grey petrosilex, very conchoidal. Beyond this, on the south face, the petrosilex is again dark grey. All these rocks are

(762) Buchanan would here reach the boundary of *pargana* Kajra, which in his time was included within the Kharakpur estates. The boundary of Kharakpur *pargana* proper was about 10 mi distant from Sūrajgarhā. It is strange that Buchanan did not visit the interesting remains at Uren, as he must have passed within $1\frac{1}{2}$ miles of that village.

(763) **Ben bans.** The 'lower hill' farther on was the long straight ridge that bounds the Morwe valley on the north.

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⁽⁷⁶⁰⁾ Abgil Chak.

⁽⁷⁶¹⁾ Buchanan started with the intention of examining the Sringi Rikh springs, for a description of which see the *Patna College Magazine*, October 1909 and January 1910, and the *Gazetteer* (1926) p. 262.

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(763) **Ben bans.** The 'lower hill' farther on was the long straight ridge that bounds the Morwe valley on the north.

divided by fissures running north and south, east and west, and horizontal, but have no appearance of real stratification. On descending to the valley⁽⁷⁶⁴⁾ south from the ghat I found a man belonging to the Raja who occupied a hut where he collected duties from those who cut wood and bamboos. He said that the place I sought was near but having walked about a mile west he showed me a hill⁽⁷⁶⁵⁾ about a mile south from me, and said that the spring was there. As there was nothing extraordinary in the place, but a copious spring and as the day was becoming intensely hot I did not choose to proceed having seen the nature of the strata which was my principal object.

30th March —I went to Loheta⁽⁷⁶⁶⁾ which is only six coses by the proper road, but I was taken round the east end of a hill and obliged to return almost a cose towards the west, which made the distance almost eight coses. I first went about four miles to a watercourse containing some stagnant water, and called Piharjan⁽⁷⁶⁷⁾. I then passed through a low part of Korokpur, for rather less than three miles when I came to the old fort called Kakara⁽⁷⁶⁸⁾ which is just within the boundary of Surjogorra. This is exactly on the plan of Asorgur in Purniya or Kornogur, near Bhagalpur, that is it is a large elevated space, without any cavity in the centre, and contains many bricks so that it must have been rather a great castle or palace than a fort. It is about five hundred yards square. On its east side is a lower space about four hundred yards square which however, contains many bricks, but the surface is very uneven as if the buildings on it had been detached.

(764) The valley of the Morwa.

(765) The Springrikh hill on the opposite (south) side of the valley on the lower (northern) slope of which are the springs. This is the only instance recorded in the Journal of Buchanan having failed—here owing to the great heat—to reach his objective. The springs are of no special interest, as the temperatures are comparatively low ranging around 66°–87° Fahr.

(766) Loheta, about 2 mi. SE. of Basaml.

(767) Perhaps the Sonajan M. of the S.S.

(768) No such place is marked on any of the maps; nor is any account of this large old fort available. The site must be close to Rājpur and Ghusat, and it should be examined.

East from this again, are five or six old tanks, the spaces between which contain bricks and some small elevations. These were probably occupied by domestics, and the tanks were formed in making the bricks. About nine miles from Surjogorra I came to lands exempt from inundation, near a detached hill which here forms the boundary between Kurokpur and Surgorra. I proceeded north-east, skirting this hill⁽⁷⁶⁹⁾ for about five miles, when I came into a pretty wide opening between it and the mountains on the east, which are higher. Passing south between them, and leaving a small branch from the detached hill to my right, I went about two miles to Loheta in a fine plain, apparently surrounded by hills on all sides. In the evening I went about $1\frac{1}{2}$ miles to the east, southerly, to see a quarry of mill stones on a small hill⁽⁷⁷⁰⁾ named Kamuya, or working place. This is separated from the hill, which bounds the plain of Loheta on the south, by a narrow passage, by which there is a road to Marok,⁽⁷⁷¹⁾ the great hill which forms the centre of this cluster. The quarry is on the southern declivity of the hill, and runs nearly east and west, and has been opened in different places for a considerable extent, each partnership of stone-cutters having a separate opening. Having been wrought for ages, the cavities formed are now pretty considerable. One of them, the largest that I saw, might be two hundred feet long, twenty wide, and twelve deep, but so irregularly and unskilfully wrought, and so clogged with rubbish, that the proper extent of the stratum is not readily determinable. The workmen take out a piece suitable for their purpose, wherever they can find it most easily, cut it into shape on the spot, and then look for another, until the whole quarry is so filled with rubbish that

(769) **Abhainath** hill. Buchanan seems to have gone from Sūrajgarhā to the western end of this hill passing round its northern and eastern flanks, and then going between it and the small outlying hill to Laheṭā.

(770) The long low hill to the north of **Raunakabad**. As to Kamuya, this probably, and in accordance with Buchanan's practice in transliteration, represents *lamawā*, the vulgar corruption of the Hindī word *kām* 'work'.

(771) **Mārak** hill. See above, note (739).

they can procure no more, and then pioneers are employed to clear away. The quarry is also choked with large pieces, which are as much as possible avoided, as being too troublesome to cut, for the stones required are only for handmills, but stones of a good size might be readily procured. The stone is disposed in vertical strata running east and west, having an inclination towards the north, and is divided by fissures parallel to itself into flags from four to five inches to one cubit thick and again intersected by fissures at right angles to the above and by others that are horizontal, but there is nothing of a shistose fracture in it. The substance is a uniform aggregate the component parts of which are placed without the least order, and are glassy quartz united with a greenish grey micaceous matter, the foliated nature of which may in many parts be traced but all has lost its lustre and most of it has acquired a powdery appearance. Intermixed with these are spots of a reddish powdery matter. The masses which have the finest grain are those preferred, but some are wrought the grains of quartz in which are as large as small peas. The strata that are wrought, are bounded on each side by strata of the same materials but which are considered as useless, and this may be the case with that towards the south or towards the plain and which is called Bujeri⁽⁷⁷³⁾ or hard by the workmen, and contains too great a proportion of quartz and is very much intersected by fissures in all directions. The stratum on the north or above the quarry, is much freer from fissures than the millstones, and very fine masses are procurable. It wants the reddish spots but in other respects has an entire resemblance to the coarser grained millstones but is hard on which account it is called Kurra⁽⁷⁷³⁾. It no doubt, however would form a very fine stone for building, and those who are accustomed to granite would work it with ease. The stonecutters, farmers and native officers have so little curiosity here that they do not know

(773) From *bajjar* adamantine hard (Sansk. *vajra*)

(773) i.e. *kayā* (Hind.) hard

the names of one of the hills by which they are surrounded. This is only known by those who cut bamboos, planks, and small posts, which seems to be a considerable occupation, and is followed by the Musahor and Bonawar⁽⁷⁷⁴⁾ All the people here are most excessively stupid and timid, and will give no account, on which any reliance can be placed

31st March —In the morning I went to see a quarry of what the natives call Siya⁽⁷⁷⁵⁾ or black stone, which they use for making thin flags, like tiles, with which the floors of some wealthy persons are formed I afterwards learned that it is used for making platters I went rather more than $1\frac{1}{2}$ miles south-west, until I came to an opening in the hills,⁽⁷⁷⁶⁾ by which the plain of Loheta is bounded on the south, and which I found to consist of granular petrosilex or a very fine-grained aggregate of quartz and hornstone with large conchoidal fracture Through an opening comes a large torrent, Goriva kol,⁽⁷⁷⁷⁾ at present dry, and its channel is filled with fragments of the Siya I ascended the banks of this torrent about half a mile, finding the road all the way good and level; but the hills approached there so near, that the only way of advancing was in the channel, stepping from one large mass of stone to another Here the rock is granular, consisting of small grains of glassy quartz

(774) Musahar, literally 'rat catcher', one of the most interesting of the non-Aryan tribes, closely connected with the Bhuiyās of the east-central highlands See J C Nesfield's monograph in the *Calcutta Review*, January 1888, Crooke, *T & C N W P & Oudh*, IV, 12 f

Banwār, literally 'wood-man', the professional wood cutter The name is also used of a people who are regarded as forming a distinct caste in the Sontāl Parganas (see Risley, *T & C*, s y) Buchanan's experience recorded here has been that of every person who has prosecuted inquiry into the natural products of the country, its animal and insect life, etc It is only the jungle folk, for instance, who, can tell the names of all the trees and plants, animals and insects found among the hills Such details do not come within the ken or interest of the plains dweller, though he may live within a few miles of the hills

(775) i e *siyāh* (Pers), 'dark' or 'black'

(776) No doubt the Amrāsani Kol For an account of the slate bands in these hills, see V Ball, *Economic Geology* of I, p 552, and for the local quarries, the development of which is wholly due to the enterprise and perseverance of Mr C Taaffe Ambler, see the *Gazetteer* (1909) p 137—39.

(777) Not named on the S S

united by a white substance. Both this and the more perfect petrosilex are called *Bajeri* by the workmen, although different somewhat from the stone so called on Kamuya hill, but the granular stone here shows the steps of transition. Here both these stones are cut into small cuboid mass[es] by fissures vertical and horizontal. I saw some masses that were almost perfect cubes. The air seems to act very slowly on it as scarcely any fragments are contained in the torrent, which is filled with those of the Siya. On ascending over these for a considerable way and to a considerable height, in constant expectation of coming to the quarry, I came to where the torrent in the rainy season falls over a great rock of this Siya. On asking if this was the quarry, the workmen laughed, and said that it was the hill, to break which was quite impossible, that they contented themselves with selecting from the channel flat pieces of a good nature and proper thickness, which were free from rents, and required only to be cut square. and not one piece in five thousand possess the qualities. Where the mass, however, in other respects is good, and is only too thick, they so far exert themselves as to split it into two or three with wedges a very easy operation for the stone is a black slate. The pieces that they prefer are of a somewhat silky lustre, and acerose structure. (I afterwards learned that they have a quarry which they concealed.) On breaking the rock which externally has not the smallest appearance of fissure or strata, I found that it consisted of similar black layers but contained some fine white powdery matter in the interstices and had nothing acerose in the structure. This is very heavy, owing probably to an admixture of martial pyrites, which indeed in some places is scattered in conspicuous small clusters. Having mounted this rock, where a little water trickles down the surface, and having passed some pools of water I came to another rock of the Siya where that stone is more perfect although not of such a quality as the workmen generally choose, because it divides into slates too thin for their purpose,

but it has a fine silky gloss, and is not acerose. The rocks on the hills on either side are very much shattered by fissures, but consist of parallel layers running east and west, as do those of the Siya. They are in a state of great decay, and show a transition from petrosilex or Jasper, to slate. This Siya is undoubtedly a slate or schistus, but whether or not an Argillite, I shall not say. It has exactly the clear sound of a good slate, but its silky lustre and colour with many shining particles seem to point it out as rather of the nature of hornblend or potstone, and it has also the great toughness of that substance. It is soft and leaves a grey or white scratch. I have little doubt but that skilful workmen would here procure very good slates for roofing houses, and also slates for accomptants. Where the pyrites abounds, I have no doubt that it would serve for making Coperas, and the other parts have such a resemblance to the *gentle* sclate of Baldernoc and Campsie,⁽⁷⁷⁸⁾ that in all probability they would produce Alum. The woods as usual swarm with Hanumans.

In the evening I went to the Invalid Thanah near Monghyr, named Aramnagar.⁽⁷⁷⁹⁾ I returned about $1\frac{1}{2}$ mile by the same way that I had come from Surjagorra and passed through the strait between two hills, crossing two watercourses, one of which gives a small supply for the lever. On the hill towards the west, Dosduyar,⁽⁷⁸⁰⁾ the rock is a livid greyish aggregate of quartz and petrosilex. On the east the hill Mohila⁽⁷⁸⁰⁾ is exceedingly rugged, projecting high shattered rocks rising into peaks and divided by vertical fissures. This shows the transition from the petrosilex to the millstone, as it consists of the petrosilex with concretions of glassy quartz immersed. I continued to skirt this eastern hill for about a mile,

⁽⁷⁷⁸⁾ Baldernock and Campsie, in Stirlingshire, Scotland

⁽⁷⁷⁹⁾ This invalid depot, which is not marked on the maps, seems to have been situated about two miles to the south of the Monghyr fort.

⁽⁷⁸⁰⁾ Neither of these names appears on the S.S. Mohila seems to be the big hill (835 ft.) east of Basauni. Dosduyar may be the little detached hill, S. by E. of Basauni, but the name—the hill of the 'ten gates'—makes it probable that the bigger hill to the west of this is intended.

when I came to its corner towards the north-west and proceeded east about two miles to Dohara (781) a large village at its north east corner, where it assumes another name I went about $1\frac{1}{2}$ mile farther near the hills until I came to the country subject to inundation which was indeed near my route all the way after passing the strait between Dosduyar and Mohila. About a quarter of a mile within this low land I came to the boundary of the division of Mongger and crossed the extensive sheet of wheat for $4\frac{1}{2}$ miles to Porran (782) village on the banks of the Ganges. Not the smallest trace remains of the lake laid down by Major Rennell (783). The whole is cultivated. It had now been long dark and all the hills appear[ed] on a blaze (784). In fact at this season they burn continually, night and day but in the latter the flame is not visible. The crackling noise of the fire however may be heard passing and during the first day I was at Loheta the whole valley was involved in clouds of smoke. The natives of the villages imagine that the fire is spontaneous and commences from one stone striking against another. It certainly is often not intentional and renders the wood stunted, but I have no doubt that it owes its origin to the carelessness of the cowherds and woodcutters who kindle fires on the ground thickly covered with leaves dry as tinder and the fire runs along these consuming also all dead trees branches and grass until the whole has been consumed. Some cowherds acknowledge that they kindle it on purpose to clear the country

(781) Dohara.

(782) Parham. Parham is now quite two miles from the nearest channel of the Ganges.

(783) Rennell on his 1773 sheet and in his *B. A.* Plates II and XV shows a lake extending some 4 miles from N. to S. about $1\frac{1}{2}$ miles E. of Dohara. Captain L. F. de Glos who surveyed this area for Rennell passed over the ground in July 1767 i.e. in the rainy season; and this may account for the lake shown. This tract still goes under water sometimes when the Ganges is in very high flood.

(784) From the end of March when all vegetation becomes parched jungle fires are of frequent occurrence and often of wide extent on these hills.

At Porran I joined the road from Bhagalpur to Patna, and went about four miles to Aramnagar, having crossed a watercourse,⁽⁷⁸⁵⁾ on which has been a pretty large bridge, which is said to have been broken down by Kasim Ali

2nd April—I went to Mongger in order to procure quarters for the rainy season⁽⁷⁸⁶⁾ The weather for ten or twelve days has been exceedingly sultry with a hot dry wind from the west But this has now abated, and the winds have become easterly and cold at night

7th April—I set out with an intention of going to Rishikund⁽⁷⁸⁷⁾ Having passed rather more than half a mile through the fort to the Bazar gate, I went through the town, and not quite $1\frac{1}{2}$ mile from the gate, came to a passage lying between two rocky hills That on the right is low, but very rugged. That on the left is pretty high, I believe it is that on which the hill house⁽⁷⁸⁸⁾ is situated, but the morning was foggy. About a mile farther, I came to another low rocky hill, and rather more than a quarter of a mile from thence, to Sitakund,⁽⁷⁸⁷⁾ which I reckon four miles from the Bazar gate It is situated in a fine plain, but there are a good many small rocky hills north, south, and west from it, and in the latter direction is a small marshy lake Towards the east is level The kund is a fine square reservoir, partly dug in the rock, and is surrounded by a wall and steps of brick in good condition, but very rude The air bubbles up from the bottom in many parts but the spring is not considerable, the run being very trifling, far inferior to any of the three at Bhimban The

(785) i.e. Dakrā nāla See Appendix 5

(786) This means that Buchanan worked up the material he had collected, and wrote his Report on the survey of the then Bhāgalpur district at Monghyr during the hot weather and rains of 1811 We do not know where Buchanan's quarters were, but from his reference to the distance "through the fort to the Bazar gate", I suspect they were just outside the Patna Gate, in the vicinity of the old 'Mosque House' By Bazar gate, is meant the East Gate, over which now stands Mr Dear's clock tower

(787) For Rishikund, the site of which is not marked on the S S, see *Gazetteer* (1926), p 255, for Sitākund, *ibid*, p 259-62

(788) The big house on Pīr Pahār hill See Appendix 6.

thermometer in the open air was at 68°. In the hottest part of the reservoir, where most air bubbles rose, the heat was 130°. The people say that the heat began to diminish about the first or second of April, and will be still lower. In about four months it will return to the highest pitch, and the quantity of water will increase. The pool may be twenty feet square, and four or five deep. Near it are several other pools of cold water, but all dirty and inconsiderable, as none sends forth a stream. The Pujari Brahmans are very squalid and clamorous for money but not uncivil, when this is refused. About a quarter of a mile south of Sitakund is the nearest hill. A vast mass of whitish quartz the crevices of which support a few bushes. It is intersected by horizontal and vertical fissures the latter crossing each other at right angles. The masses are longest in the direction of east and west and the rock may therefore be considered as forming vertical strata in this direction. The rocks of all the other hills seem to be of the same nature. In many parts in decay they split into shistose fragments. Rather more than 2½ miles south from Sitakund I came to another great rock of quartz or jasper but the greatest length of its fragments extends from north to south and in decay it splits in the same direction. The quartz is curiously mixed white and dark reddish brown the latter occupying large irregular spots. About two miles from thence, on coming near a small detached hill, I met a man who asked me whether I intended to go to Rishikund or to my tents, which were pitched at Uбай Nullah (789) about one coss distant from that place. I went to the tents, passing to the east of the hills, and found my tent about ten miles from the river side at Mongger, a little east from another small detached hill called Bisusinggi (790). I could learn nothing satisfactory concerning the reason why my tents had

(789) Not named on the S.S.

(790) Not named on the S.S. but the late Mr. V. H. Jackson has noted against this name,— Prominent small conical hill.

not been taken to Rishikund,⁽⁷⁹¹⁾ the guides throwing the blame on my people, and these recriminating, and it is difficult to say which are the most perverse and stupid

8th April —In the morning I went first to visit Rishikund. I first crossed the nullah called Ubayi at my tents, where it is a dirty stagnant puddle, but contains a good deal of water. Passing between Bisusinggi on my right, and Boluyar⁽⁷⁹²⁾ on my left and south, I came into a fine valley bounded by these hills on the east and by a higher chain on the west. In this I crossed the Ubayi three times. It is there a small stream, not so large as the Onjon near its source, but not much inferior. About $2\frac{1}{2}$ miles from my tents, I came to the north side of Rishikund, immediately at the foot of the western hills, and near the south-east corner of that called Buidorni,⁽⁷⁹³⁾ which consists of quartz or Jasper. The khund is very ruinous and dirty, but it has been faced with a brick wall about 140 feet square. The whole is filled with water, but in many parts it is overgrown with weeds and bushes, the heat, especially on the side most remote from the hill, being so moderate as to encourage vegetation. The bottom is in some parts sandy, and in others rocky, and most of the water seems to issue from different crevices in the rock, all along the west side of the pool. The air bubbles, probably the source of the heat, rise from the whole extent near the hill, and come mostly from the bottom for a space perhaps thirty feet wide, and one hundred

(791) Mr Jackson has left the following note in reference to this remark. —

“ Rishikund has a very bad reputation for fever (1912 and 1917), which is probably the reason. There is a temple, built about 1877 by the Maharaja of Darbhanga. The *panda* (priest) told me he does not sleep there, but goes to Galimpur, and gets sick of going over the same road every day ”

(792) Mr Jackson has noted on this name, — “ called to me Bhāluhār ”

(793) Not named on the S S. From a little sketch inserted in the MS it appears that Bisusinggi is the little hill due east of the spring, Boluyar is the long hill to the south of Bisusinggi and south-east of the spring, and Buidorni the hill above the spring on the west, which forms a portion the main range.

and forty feet long. Had the pool been judiciously constructed, as at Nilkunt⁽⁷⁹⁴⁾ in Nepal, it ought to have contained only this space, and the walls having been built to a proper height, a paved area might have been constructed below, the water allowed to fall on it from various spouts for shower bathing, and under this might have been delightful baths. The heat and depth of the water would thus have been sufficient to keep the pool clean. On the south side of the tank are some wretched huts one of them a temple of Siva. I saw none of the people attached, who are seldom visited. Where the air bubbles issue from the sand, they occasion a curious appearance, they form a small kind of cavity like a crater in the centre of which is a small rising with sundry perforations through which the air always rises in small bubbles but every now and then a kind of explosion takes place, an accumulation of air bursts through the small rising, forces its sand up to the surface of the water and when it subsides, adds to the size of the little circular mound by which the crater is surrounded. The thermometer, when I came to the kund, stood at 72°. Immersed in the water, where it issues from the rocks, it rose to 110°, and in one of the craters it rose to 114° ⁽⁷⁹⁵⁾

From thence I went south-west, some way, to Champa kol,⁽⁷⁹⁶⁾ a torrent, from whence stones for making platters are taken. I could not ascertain the distance the roads are so bad and I made so many halts. The natives content themselves at present with picking up flags from the channel but formerly they have quarried from the living rock, which is of a

(794) See above note (731).

(795) Mr Jackson recorded the following temperatures (Fahr) on the dates specified:—

(a) Spring to N of the temple issuing direct from the rock.—
17th October 1912 113.1

6th November 1917 113.3° (hottest place)

(b) Big pool near western edge close to the hill.—

17th October 1912 113.5° (thermometer pushed into gravel)

6th November 1917 113.3° (in small pool)

shistose structure, but the masses are intersected by fissures, vertical and horizontal, exactly as in the surrounding Jasper. The shistose Lamellæ are vertical and run north and south. They are of a fibrous fracture, and shining iron-grey colour, inclining a little to blue, like slate.

From thence I went through a very bad road in a narrow valley between the great hills on my right, and the detached hills named Boluyar and Duarba⁽⁷⁹⁶⁾ on the left. Both are exceedingly rugged, and towards the valley at least, consist entirely of Jasper. On the top of the great ridge, immediately south from Champa-kol, is a quarry, from whence Khori is dug. The distance was too great for me to visit it. It is vastly softer and smoother than the Khori of Rajmahal, and communicates its name to the hill, on which it is found, which is the highest of the ridge, and is called Khorikan⁽⁷⁹⁷⁾ Maira. At the south end of Duarba, I entered a narrower and rougher valley, between a most rugged hill on the east, named Mayin pahar,⁽⁷⁹⁸⁾ and a part of the great ridge named Dima pahar⁽⁷⁹⁹⁾ and proceeded up between these, not quite half a mile, to a narrow gap called a Murcha,⁽⁸⁰⁰⁾ where there has been a wall to defend the pass. The stone here is a kind of aggregate consisting of white dry quartz, and glassy quartz most intimately combined without order. Beyond this I entered into a broken valley within a torrent dividing into several branches. The chief branch leads to Jhalkhund,⁽⁸⁰¹⁾ where there is in the channel of the torrent a deep pool filled with water, and a small rill falls into it

(796) Not named on the S S From the sketch referred to above (note 793), Duarba is the small detached hill to the south of Boluyar

(797) Mr Jackson has noted,—“called to me Khalika Marā”. This appears to be the hill marked **Ghorakhor** (1316 ft) on the S S

(798) From Buchanan's sketch, this is the hill to the south of Duarba, separated from the main range by a narrow defile, across which the *morchā*, or fortification wall, had been made

(799) A part of the main range, marked on the S S **Rishikund** (1088)'

(800) i.e. *morchā* (Pers) 'entrenchment' or 'fortification wall'.

(801) **Jalkund N.**

from the rocks above, but this is so inconsiderable that it does not occasion the pool to overflow. The water, being stagnant and very dirty from rotten leaves was reckoned good by the natives. In this channel there were many fragments of jasper white, grey, and grey and red mixed, but I saw no rock of that substance. On the contrary all the rocks were of a fibrous silky texture. That on the right of the pool resembled entirely the slate of Champa Kol only it had nothing shistose in its fracture. I presume it may be an *Amiantus rudis* (802). In many parts veins of white quartz pass through this rock in a very irregular manner and on the hill which bounds the torrent on the left the stone is formed of thin parallel layers distinguished by various shades of colour, and in some places most curiously waved, and intermixed with quartz. All the fragments in this torrent are irregular cuboidal masses. The torrent which joins it below the pool is called Sitakober (803). And its channel is filled with slates exactly like those at Champakol but on its left side may be traced a quarry, that has been wrought to a very considerable extent and with more skill than is usual among the natives. A very fine face has been formed on the side of the hill, the rubbish has been thrown to each side in two heaps, leaving a passage for the water to drain off. The rock I would call a shistose *Amianthus rudis*. It may be divided into parallel vertical lamellæ of a striated texture, which run north and south, but the rock is divided by vertical fissures running east and west into layers from twelve to eighteen inches thick. This is rather singular, the lamellæ of shistose stones being usually parallel to the most remarkable fissures. It would appear that the workmen formerly lived in the fork between these two torrents, where there are many heaps of chips and

(802) *Amianthus* is a name applied to the finer kinds of asbestos but is more properly applicable writes V Ball, to fibrous varieties of hornblende.

(803) Jackson notes,— Sitakobir. Buchanan's sketch shows it to be the little stream that issues from the north-west corner of the valley out of which the Jalkupā nālā flows.

broken platters, which were probably the chief manufacture. The stone, although fissile, does not break with that smooth surface, which slate does, and would therefore be unfit for roofs.

From this fork I returned to the Murcha, and from thence to the south end of Duarba. Then along its west side for about three quarters of a mile I then passed between it and Boluyar, which is about a mile long. From thence to Bisusinghi may be about half a mile. My tents were a little east from the last-mentioned hill.

9th April.—I went over the hills to Masungunge,⁽⁸⁰⁴⁾ and can form little estimate of the distance, as I walked most part of the way and made many stops, in order to give my palanquin time to come up, which it did with great difficulty, owing to the steepness and rockiness of the road. From my tents to Bisusinghi was rather more than half a mile. From Bisusinghi I went west to a hot spring called Burka,⁽⁸⁰⁵⁾ which rises from the foot of the same hill, that supplies Rishikund, from which it is a little way north. It does not send forth so much water as Rishikund, but perhaps as much as Sitakund, and its water, like that of the others, is neglected for cultivation. There are in fact three springs, two come from the rock, and unite in the same pool. These are accompanied by no air bubbles, which probably unite with the water in the interior of the mountain. The third rises at a little distance in some spouty ground, occupying a considerable space, in which the water oozes up in different spots, and forms a little

(804) **Masunganj**, a little more than a mile due south of Jamālpur

(805) Jackson notes (under date 6th November 1917) "Burka due west of Bisusinghi, only 3 or 4 minutes walk by road (Waddell, *J A S B*, LIX, 1890, pp 224—35, absurdly indentifies Buchanan's Burka with a spring which he calls Bhaduria bhur—temperature only 98.5°—on the other side of the Jamālpur ridge). General resemblance to Rishikund. All the springs rise from beneath the surface of the water in the dammed-up pool. Three patches—hottest centre along hill side, where the temperature of a small patch, in which bubbles occasionally rise, close to the surface of the water was 110.3°. Many stones are tied by pieces of cloth to a horizontal branch of a tree (smeared with red pigment) above the water near the centre of the western face 'for fulfilment of wishes'".

stream Air bubbles rise in many parts of this, not regularly, but at short intervals The whole collected by a proper reservoir would form a very fine bath The heat in all the three springs was 112° The stone here was a red and grey jasper The masses much shattered, but not shistose

From Burka I went north, along the foot of the hill, for about a quarter of a mile, and then began to ascend on foot I took rather more than three quarters of an hour to reach the summit, but the road was exceedingly steep and rugged I do not think the distance exceeds half a mile, and allowing an ascent of three feet in five,⁽⁸⁰⁶⁾ the height of the pass will be 1,575 feet, and this is one of the lowest parts of the ridge For the first part of the way the rocks were red and white jasper, rather in a state of decay, the white especially having acquired a powdery harsh substance The rock is marked by incipient vertical fissures showing the commencement of a shistose fracture These fissures run north and east, but the blocks so far as I observed had no appearance of stratification Above this to the summit of the hill the rock was whitish inclining to a livid jasper or quartz, without the least tendency to shistose fracture, but wherever it was decaying, it was separated into irregular thin flags, standing vertically and running north and south Where the rock was most entire, it had nothing of this appearance, being cut into cubical masses by fissures vertical and horizontal The passage over the hill is called Amjhor⁽⁸⁰⁷⁾ Ghat from a spring at the foot of the hill on the west side, which is shaded by a mango tree On the summit is a heap of stones, to which most passengers add one, and I observed two others on the western descent My guides could assign no other reason but custom for

(806) An over-estimate the vertical height would be more like half that suggested.

(807) Amjhar

the practice⁽⁸⁰⁸⁾ The descent took me forty-two minutes, but I made fewer halts, the road being less broken, and I did not wait for the palankin. On the descent I had a most beautiful and magnificent view, for my way being on the side of a rocky ravine, I had a view down this of a fine small plain, bounded on the west by two immense rocks named Mogal Mara, and Puthorkankar Chur; and through the gap between these, I had a magnificent opening towards the wheat fields and mango groves on the banks of the Ganges. All the hills, where not bare rocks, are finely wooded, and in many parts were glowing with the *Butea superba*⁽⁸⁰⁹⁾ On descending a little way I came again to the red and white jasper, here quite entire, and having somewhat the granular structure of an aggregate stone. Farther down, the rock, also entire, was of jasper, almost entirely red, but rather granular. Fracture strongly conchoidal. Here I observed a small excavation in the soil, and was told that it had been formed in order to dig out a soft kind of stone, called Parori mati,⁽⁸¹⁰⁾ which both men

(808) How familiar the answer given to Buchanan sounds! *Asā hi ravāj hai, Sāhib*! Such piles of stones are commonly found in all parts of the Vindhya and their offshoots by the side of the path through or over a pass, sometimes on the summit, but more often at the beginning or end of what is regarded as the most 'dangerous' part. I have often seen travellers and jungle folk dropping stones on one of these cairns, and the explanations given in response to inquiries generally fell under two heads, namely, that it was done either (a) to ensure a safe passage through the pass, or (b) as a thank-offering for having passed through safely. Such heaps, accordingly, will frequently be seen at both ends of a ghāt. There are two chief dangers in such places, namely (1) the local deities or spirits that are invariably supposed to haunt such localities, and (2) dangerous wild animals, both of which call for propitiation. Occasionally such a cairn marks the site where some person has actually been killed by a wild animal, e.g., the case of a *baghāt*, where the ghost of a person killed by a tiger haunts the vicinity, and must be propitiated [cf W Crooke, *Folk-lore of Northern India* (1896 ed.), I, 267]

(809) A tree allied to the *palāśa* or *dhāk* ("Flame of the Forest"), sometimes called *parasbel*, but generally known in S Bihār as *chihūnt*. The bright orange-scarlet flowers bloom in March-April.

(810) The expression is unknown to me. *Paror* or *parorā* is the common form used in the S Bihār dialects for *palwal* (*Trichosanthes dioica*), a climbing cucumber extensively eaten as a vegetable and reputed to have valuable medicinal qualities. It is possible that the earth is so called from its resemblance, or fancied resemblance, in properties, taste or colour to this cucumber (which, when ripe, is yellow or orange). Or the word may be a corruption of *parwart*, which would mean 'nourishing'.

and women eat. It is soft, in small masses mixed with earth, and has somewhat of an unctuous feel and reddish colour. It is undoubtedly the red jasper in a state of decay, just as the khori mati is white jasper decayed.

While waiting for my palankin, I went a little way up the ravine, along the torrent which rushes down its bottom, to see Amjhor. I first came to a pool exactly like Jhalakhund, but not quite so large. The natives admire its water, as it is exceedingly dirty. It is shaded by a mango tree. Clambering up the rocks I came to a second pool as dirty but it receives a supply of water from a small spring issuing from a crevice in the rock and which supplies both pools. This is very fine water, but the crevice was so narrow and the water so soon fell into the pool, that I could not procure a drink. The thermometer in the shade stood here at 70°. In the spring it rose to 80°, which I presume is the medium heat of the country although in a country so abounding with subterraneous heat no great reliance can be placed on that inference. At this spring the stone is of the same nature with the quarry which will be afterwards described and runs pretty evidently in vertical strata north and south, because it is somewhat decayed. In some parts it is composed of parallel layers distinguished by different shades of colour placed vertically and running north and south without abating in the least from the toughness of the stone which is excessive. In one place I observed a vertical stratum of fat white quartz, about one foot thick passing north and south along with the potstone. The whole hill north from the pools consists of this stone and several quarries are wrought in it. I examined that at its north end which is the most easy of access and to which I proceeded as follows.—Returning to my palankin at the foot of the pass, I proceeded west to the corner of Mogol Mara, about three quarters of a mile distant, over a plain covered with stunted trees. The west face of this hill shows a bare rock

of great extent. It is divided into small shattered fragments by fissures nearly vertical, and others nearly horizontal, and extending for great lengths, but without any very regular order. I can not call it stratified, or approaching to that in any degree. It consists of a fine-grained aggregate of quartz glassy and white, with some black specks. From thence I proceeded north about half a mile to the south end of Puthurkanka Chur, a hill rocky and precipitous towards the east, exactly like Mogol Mari. It also consists of exactly the same stone, but in some parts it is stained red. I went north between this rock and the hill of potstone for about half a mile, and then walked up to the quarry. A very considerable excavation has been made, and the stone is cut by wedges. I cannot call it stratified, as the fissures exactly resemble those of Mogol Mari and Putharkanka Chur. The only thing in request seems to be the Linga, and many rude blocks were now lying in the process of shaping, some were very large. When rudely blocked out, they are taken to Mongger to be polished. Excellent stones for building might be procured, but I doubt whether large columns could be procured, on account of fissures. It is an indurated potstone, very fine grained, with small black crystals of hornblend, and in fact is hornblend in mass, as it is called, the two stones running into one another, so as to be scarcely capable of distinction.

Having returned to the corner of Putharkanka Chor, I went about two-thirds of a mile to my tents, rather more than a quarter of a mile from the western foot of the hills. The hills here, from the western face to the springs at Burka, I should take to be about three miles wide, the natives reckon two coses, but they judge by the time taken to walk over them.

10th April — I went about ten miles to Kareli Kol, ⁽⁸¹¹⁾ nearly south from Masungunj ⁽⁸¹²⁾. I kept at about half a mile distance from the hills to my left,

⁽⁸¹¹⁾ The little valley (*kol*) to the south of *Karaili*, a village about 5 mi S E of Dharharā

⁽⁸¹²⁾ *Masumganj*, as above

from whence three remarkable promontories project towards the west. The first I reckon to be about $1\frac{3}{4}$ mile from Masungunj, the second I reckon $4\frac{1}{4}$ miles, the third about six miles. About nine miles from Masungunj, I came near the hill by which this valley is bounded on the south, and turned east into a recess for about a mile, where at its bottom are two or three wretched sheds, in which the quarriers reside. The little recess here divides into two branches, down which two torrents come. The most considerable enters the north corner of the recess from the east, and is the proper Kareli kol. Its upper part contains a small stream in which I found two species of fish, but the water is absorbed before it reaches the little valley. The other torrent is called Norhor ⁽⁸¹³⁾ and at this season is quite dry. It comes from the south. On the east side of this is the quarry, a little up the hill which forms the bottom of the recess. It approaches nearer to roofing slate than any I have yet seen, the grain being fine and the fissures smooth. It runs north and south and is inclined towards the west, about forty five degrees. The workmen have managed it more judiciously than anywhere else, except Sitakober. Many parts of the rock have decayed into a reddish substance, which they have cut down perpendicularly until they formed a smooth surface on the undecayed part which they then split off with wedges. The trench runs north and south. The same substance runs north to the torrent called Kareli, which it crosses but there it becomes more solid, more shining and striated, and no doubt continues all the way to Masungunj. To the west of it, on both sides of the valley the rock is a fine-grained aggregate of quartz, with black specks and flakes of a reddish colour, which do not run parallel with the fissures. These are very irregular. It would thus appear that the potstone in its various forms runs north and south through this range with silicious rocks on either side, both towards the east and west.

(813) Not named on the S.S.

11th April —I went to Loheta ⁽⁸¹⁴⁾ In the first place I returned by the way I came yesterday, first 11/15 mile west to the end of the hill on the right of the valley, and then north-west two miles until I passed the third of the promontories that I had seen yesterday I then left the old road and turned south-west having on my right a small detached rocky hill Proceeding south-west about $2\frac{1}{4}$ miles I came to the entrance of Marok, ⁽⁸¹⁵⁾ where a deep recess is formed in the mountain of that name The narrowest passage between the hills in the entrance has been fortified with a double rampart of loose stones. The hills, by which this entrance is formed, are narrow and very rocky. The rock is split, vertically and horizontally, into cuboid masses, and consists of fine grains of whitish and glassy quartz, in some parts stained red, and containing small black specks. Within these outer hills is another range, also running east and west, and immediately contiguous, but they are vastly rugged and broken. Passing these, I went south-east to a third range, which is separated from the middle one by a narrow valley, in which is a dry torrent, but the two hills unite towards the west and the people who were with me called the whole Marok A little way up his narrow valley, are some sheds for those who cut timber and bamboos, and gather stones Walking up the valley some way, I saw a prodigious perpendicular rock, on the middle hill, which shows its structure admirably. It is formed into[a] kind of quadrangular pillars, perhaps two hundred feet high and eight or ten wide, by fissures running east and west slightly inclined to the north, and by others running north and south slightly inclined to the east. The pillars are jointed by horizontal fissures. The stone is of the same nature with that of the outer range, but is mostly red. On these rocks breed vast numbers of the stock Dove, common all over the ancient world in such situations; and under projecting

(814) *Laheta*, already visited by Buchanan on the 30th March

(815) i.e. the entrance to the deep, magnificent gorge that leads south-eastwards to the flank of Mārak hill.

parts hung many large nests of bees, which the people have not enterprise to take. The inner hill consists entirely of slate, exactly such as at Kareli, only it runs east and west and is more inclined from the vertical position towards the north than the other is towards the east. I went west along its face for some way until I came to a small recess, in which there is a torrent which in its upper part contains a small stream but is dry where it enters the plain. Having returned to the entrance and remeasured by the old road a hundred yards or two ⁽⁸¹⁶⁾ I turned to the north-west for about $1\frac{1}{2}$ mile, when I approached near a rocky hill on my right and continued to keep near it while I proceeded about two miles east ⁽⁸¹⁷⁾. There were hills also on my left but at some distance, nor do I know that they are a continued ridge. I now entered the wider plain of Loheta, having hills on my left only those to the right receding towards the north. Two-thirds of a mile from them I crossed a dry torrent and at an equal distance farther I came to the village where I had formerly halted.

12th April —I went in the first place to visit a quarry of the shistose hornblend at Amarakol ⁽⁸¹⁸⁾. Proceeding west a little southerly, I came to two small hills between which I passed, and then went south through a stony plain for about half a mile in which space I crossed the torrent which comes to Amarakol. Having thus come to the root of the hills I found those which form the outer gap exceedingly broken and rugged. The stone is broken into cuboid masses by fissures running east and west with an inclination towards the north of about 20° by others running north and south nearly vertical, and by others almost horizontal with a dip however, towards the north. The stone is a dark grey very fine grained aggregate. When entire the particles are little distinguishable,

(816) The object of such measurement is not explained. Possibly Buchanan estimated distances travelled on foot by paces.

(817) So in the MS. a slip for west

(818) Amrasani of the S.S. which should read Amrisani.

and the stone resembles a jasper, but in decay its nature becomes evident, and the crust consists of grains of quartz, like poppy seed, united by a white mealy substance, which has lost its black colour. This stone, in some parts, contains red dots. Within these rocks is a little valley, with a recess running both to the east and west, between the outer hills and those which are next to them. Here is a little fine land, but the extent is trifling. Following the torrent into the second range of hills, I found their northern face to consist of a similar aggregate, but in most places it had a reddish hue. These hills are less rugged. The channel here is entirely filled with fragments of the hornblend, and advancing a little way up, without any separation of the hills, I came to where it formed the rock in the channel, and on both sides. Immediately on reaching this, I found a fine little purling stream of clear water, in the pools of which were many fishes of the two kinds found at Kareli, but the stream here is more copious. It is, however, absorbed the moment it reaches the quartzose rocks, as is also the case at all the other kols that I have seen, where the water is found only on the hornblend. At the hot springs again the rock is quartzose, but then it is above the water, which I suspect, is turned out to the surface by a stratum of some other nature. The hornblend seems here of exactly the same nature with that at Kareli, and is only collected in detached pieces, brought out by the torrent, but I have nowhere seen larger rocks of it. They run east and west with some inclination to the north, in some parts perhaps 40° , in others not 10° . In the channel of the revulet here, I found many detached masses, exactly like the solid rock at Amjhor, from whence I could not break a good specimen. It consists of parallel alternate layers of different shades of black. Along with these were masses of a similar structure, but the layers are of various shades of red and white, and resembling much the Kori of the Rajmahal hills, but having somewhat of the hornblende lustre. It had immersed in it small cuboidal masses, but in such a state of decay that I

shall not venture to say whether they were felspar or pyrites or galena. Having thus examined the strata, I returned to Loheta, and proceeded thence to Dorhora, by the same route that I before went to Mongger. The stone at Dorhora is exactly similar to that which I have described as being found at the western extremity of the same hill, *see* 1st April

13th April.—I returned to Mongger by a road that I formerly came. Dekra Nullah is about $2\frac{1}{2}$ miles from the Patna gate. The bridge over it has been a very rude⁽⁸¹⁹⁾ pile as usual but is the largest I have yet seen in the course of the survey. About one-third of a mile from it towards Mongger, are lines⁽⁸²⁰⁾ of little strength or importance. The ditch towards the west

[*End of Bhagalpur Journal*]

(819) Dakrā nālā, *see* Appendix 5.

(820) The lines noticed by Buchanan were the remains of lines of entrenchments that ran from the foot of the rocky hills to the north of Jamālpur across the plain to the Ganges near the mouth of the Dakrā nālā, forming an advanced line of defence to the Monghyr fort from attack from the west. Entrenchments had probably been constructed here from the earliest times. Like the Teliyāgarhi and Sakrigali passes further east, this narrow gap between the hills (that were quite impracticable for the passage of armies in older days) and the Ganges was a position of the greatest strategical importance. There is reason for thinking that entrenchments had been thrown across here in Sher Shāh's time when he and the forces of the Bengal King were contending for the possession of Monghyr. Early in 1658, after his defeat at Bahādurpur being pursued by Sulaimān Shikoh, Shāh Shujā retreated to Monghyr, and is said to have constructed a rampart some two miles long from the hills to the Ganges, strengthening it with trenches and bastions, and so checked his pursuer. Whether he built an entirely new line of fortifications, or repaired or rebuilt an existing line is not clear. Next year again after his defeat at Khajuhā, Shujā once more retreated to Monghyr and strengthened these lines against Mir Jumla who was following him. (*See* J. N. Sarkār *History of Aurangzeb* II 239—40) Mir Jumla, however, bought over his ally Rājā Bihārī of Kharakpur and under his guidance went round through the hilly country (a feat even then regarded as wonderful) thus threatening Shujā in the rear in fact turning his position. So Shujā hastily abandoned Monghyr and fled to Teliyāgarhi and Sakrigali in the hope of holding these passes against his opponents. Traces of the lines of entrenchment may still be seen to the south of Safībhād close to the main road from Monghyr to Jamālpur.

APPENDIX 1.

(See Introduction, page X)

Augustus Cleveland.

The name of Augustus Cleveland (as the name is ordinarily spelt) is familiar to most students of Indian history. Eulogies on his work among the mountaineers of the Rāj-mahāl hills, or "Jungleterry" area, have been engraven upon his tomb in the South Park Street Cemetery, Calcutta, and (penned by Warren Hastings himself) upon the monument erected to his memory at Bhāgalpur. Full descriptions of these inscriptions will be found in Holmes and Co's *Bengal Obituary* (1848), page 72, and in Sir W. W. Hunter's *Statistical Account of the Bhagalpur District* (1877), page 84. A contemporary account of Cleveland, while Collector of Bhāgalpur, is given by William Hodges,⁽¹⁾ the artist, who accompanied him on one of his tours among the hills in the beginning of 1782. Hodges went with him to Bārākūp and Deoghar and back, and he gives a very interesting account of a buffalo sacrifice witnessed, and of Cleveland's treatment of the hill folk and their demeanour towards him.

To Sir William Foster, C I E, lately Historiographer to His Majesty's Secretary of State for India, I am indebted for a copy of the original "Writer's Petition" submitted by Cleveland, which is preserved among the records at the India Office. From this document we learn that he spelled his name Cleveland; that he was the son of J. Cleveland and Sarah; was born on the 19th September 1754, and baptized at St. Martins-in-the Fields in the 16th October 1754. He was appointed a Writer on the 16th November 1770; arrived in India on the 22nd July 1771, was appointed Assistant to the Collector of Rāj-mahāl in 1773, Assistant to the Council or Revenue at Murshidābād in 1774, Assistant Factor at Bhāgalpur in 1776, Junior Merchant and Collector of the district in 1780, and also Judge of the Adālat in 1782. Hodges, on his return from up country towards the end of 1783, found him ill in bed. With a view to the recovery of his health, he started on a voyage to the Cape in the *Atlas*

(1) *Travels in India*, London, 1793, pp. 86—97, 151.

Indiaman the vessel in which Mrs Hastings (who had been Cleveland's guest at Bhagalpur in 1781) was sailing to England but he died near the mouth of the Hugh on the 13th January 1784 his body being brought back to Calcutta in the pilot sloop When therefore Captain Browne was ordered in 1778 to make over charge of the three northern jungleterry divisions to the Collector of Bhāgalpur Cleveland was only 24 years of age and much his junior in years and does not appear yet to have received charge of the Collectorship (3)

Admirable as undoubtedly were Cleveland's many qualities we must not allow the glamour that surrounds his name to blind us to the merits of the men who had preceded him in authority over the hill areas and who had paved the way for his success These were Captain Robert Brooke (1772-74) and Captain James Browne (1774-1778) Brooke while sternly repressing marauders and rebels was the first to employ conciliatory measures He first won the confidence of the hill people by his kind treatment of prisoners and his consideration towards their children and women folk. He then induced some of them to come down and settle in the more culturable lands below the hills In 1774 he reported that he had thus founded no less than 283 villages between Udwa and Barkop When the later achievements of Mr Cleveland are considered it should not be forgotten that Captain Brooke was the pioneer of civilization in the jungleterry (4) Even Warren Hastings in a minute claimed that the jungleterry had been reduced to Government and the inhabitants civilized as a result of Brooke's measures—an over sanguine view no doubt Of Captain Browne's work we fortunately have his own account, (5) a perusal of which will show to what extent he had inaugurated the system that was afterwards continued and further developed by Cleveland He was faced from time to time with some troublesome outbreaks which he had to suppress but not content with the mere suppression of disorder he made a careful study of their [the hill people's] past history and their indigenous system of organization and early in 1778 he submitted an elaborate plan for their administration which met with the entire approval of the Council and drew a warm

(3) Sir William Foster has very kindly verified this date (sometimes given as the 12th January) from the leg of the slip

(4) Mr James Barton was then the Collector

(5) H. (now Sir H.) McPherson *Final Settlement Report, Southaj Parganas* pp. 26-27

(6) *India Tracts* London, 1783.

letter of commendation from Warren Hastings " His proposals " were distinguished from the latter measures of Mr Cleveland by their economy rather than by the spirit which pervaded them Great as were the later achievements of Mr Cleveland amongst the hill people, much of the credit that has fallen to him was really due to Captains Brooke and Browne, and more especially to the latter who initiated many of the reforms which the civil officer afterwards elaborated ".(6)

In this connexion the following extract from Buchanan's Manuscript Report(7) on the Bhagalpur district will be read with much interest The passage does not appear in Martin's *Eastern India* it is one of the many portions suppressed by him

" The concessions made by Captain Browne, as connected with views of a tempor [ar] y military nature, were in all probability highly proper, but the vast credit which Mr Cleveland obtained for adopting them, in what was called a spirit of conciliation, seems to have influenced the gentlemen who had afterwards the management of the district, and has produced a ruinous settlement and establishment, which, so far as I can learn, has been very far from conciliating the goodwill of the natives, and especially of the zamindars I have nowhere heard so much complaining, and I have reason to believe that when Amu Khan penetrated into the Dwab, some of them anxiously wished for his arrival in these parts, and were eager to join him, in order to have an opportunity of murdering the Europeans "

(6) H McPherson, *op cit*, p 27

(7) *Buchanan MSS* (India Office Library), *Bhāgalpur Report*, p 116

APPENDIX 2

Shah Shuja's Palace at Rajmahal

Though Sher Shah had some fifty years earlier recognized that the Rājmahal site must supersede that of Gaur or other sites on the east of the shifting Ganges it was Man Singh who first made it the capital of the eastern provinces after his conquest of Orissa in 1592. Stewart tells us that Man Singh built a palace there and constructed a rampart of brick strengthened with bastions all round the town. When Shāh Shujā was appointed by his father, Shāhjahān to the Government of Bengal in 1639 he established his capital at Rājmahāl. Though he resided for considerable periods at Monghyr (where he also had a palace erected) his headquarters were at least during his first viceroyalty at Rajmahāl. He seems to have started almost at once to build himself a suitable palace there, and strengthen the fortifications erected by Mān Singh. Stewart says that about the same time the Ganges changing its course poured against the walls of the new capital washing away many of the stately edifices. Shujā was withdrawn from Bengal in 1647 but reappointed to that province in 1649 charge of which he held until in the course of the war with his younger brother Aurangzeb he was finally driven out of the province by Mīr Jumla in 1659. Shuja evacuated Rājmahāl on the 4th April 1659 never to return. Aurangzeb's adherents occupied the town on the 18th. It is probable that during the struggle in this neighbourhood the town had been subjected to artillery fire and to damage in other ways which would account for the destruction which de Graaf says had been wrought during the civil war between the brothers. Having regard to Buchanan's description of the *Sangī dālān* which he⁽¹⁾ ascribes to Shāh Shuja and his plan⁽²⁾ of the remains left of it it is interesting to note that we possess two accounts of the palace buildings as seen some eleven years after Shāh Shujā abandoned them written by John Marshall and Nicolas de Graaf.

(1) In the *Gazetteer* (1910) p. 274 however it is ascribed to Mān Singh.

(2) Reproduced with sufficient accuracy on p. 71 of Martin's *Eastern India*, Vol. II.

John Marshall arrived in India as a Factor of the old Company in 1668, and, after some service at Masulipatam and Balasore, was posted in 1670 to Patnā as subordinate to Job Charnock. From Hūglī he travelled by river, and on the 8th April reached Rājmahāl, where he halted three days. In his diary⁽³⁾ he writes as follows —

“ The house in which the King's sonn some yeais since lived is very long. There is a Garden belongs to the house which is about $\frac{1}{2}$ Couise out of Towne South. The Garden consists of 4 Quadrangles, 2 of them built and walled with stone round about, each side being at least 200 yards long.

“ Cross the Quadrangle are two walks paved with large freestone. In the middle of each walk is a channell paved, about 2 yards broad and a foot deep, into which are very many leaden pipes, through which water is carried and runs through the Garden. The walk[s] with the channell are about 8 yards broad.

“ In the middle of each side of the Quadrangle is a large and stately Banqueting house 2 stories high, adorned with much maible marked neatly, and in the middle of [the] Quadrangle a neat Banqueting house. The South West and North West sides lie against a great Tank. At the outside of [the] Garden South is a place behind the King's sonns seat to convey up water into a Cestern, from which all the Pipes are supplied with water, which in some Banqueting Roomes is conveyed to the Second Story high.

“ The Garden is now much ruined, but hath been a very stately one. In the lodgings and rooms about it is accommodation for 1000 men.”

In the following year, when again travelling up to Patna, on this occasion by road, Marshall makes the following note in his diary under date 13th May 1671 —

“ I went in the Morning to Sasujas garden, in which are 5 Quadrangles, each (except the 4th) inclosed with brick and stone wall and houses, in which are some very pleasant and coole roomes, the biggest Quadrangle about 200 yards long and 80 yards broad, the 2d 180 long and 80 broad, which is the Maul [*Mahal*] for women, the 4th 100 long and 80 broad. This is not walled at the furthest end, but theres a great poole of water, the other for women stands also by ditto poole. The 5th is at the entrance in, and is about 50 yards long and 50 broad.”

Nicolas de Graaf was a surgeon in the service of the Dutch West India Company, who on his third voyage visited Java, Ceylon and Bengal. He reached Hūglī in October 1669. Next year he was deputed to Patna, to treat the Director of the Dutch factory there, Joseph Sanderus, who had been long ill. He travelled by boat, reaching Rājmahāl in September 1670, and there he spent eight days looking at the sights

(3) *John Marshall in India*, Oxford, 1927, p. 70—71

and drawing with the special permission of the Muham madān commandant a plan of the Palace and Gardens of Cha Sousa or Saseasa (as it is spelt on the original plan) This plan I have had reproduced (on an enlarged scale) from the plan in an early Dutch edition of his travels Comparing this plan with Marshall's description certain discrepancies will at once be noticed Though de Gnaaf apparently had the reputation among his Dutch associates of being a good draftsman I may warn the reader that he seems to have had very little idea of drawing to scale This defect was established beyond the least doubt when dealing some years ago with a plan of the fort at Monghyr which he drew later on in the same year and which also appeared as a plate in his book Though he professed to have carefully measured and recorded the dimensions of the fort I found his plan to be very inaccurate and the several parts out of due proportion Similar defects possibly occur in this plan Along with the plan I give an English rendering of his explanations referring to the lettering thereon In order further to elucidate his plan I give below a translation of such passages in his account of Rājmahāl as bear upon these remains

The town fortifications and bastions of Ragi-mohol extend along the banks of the Ganges which at this place is very broad and divided into different small rivers It has several rather remarkable buildings. by the water's side a fine palace and a set of apartments for the ladies

the Dutch have a factory and a warehouse there

Behind the factory are seen the palace and the gardens of Cha Sousa brother of Orang-Czeb who is the Great Mogol of today and several other buildings and mosques of the Muhammadans which have been almost completely ruined during the war of 1657 and 1658 I have delineated the whole extent of the Prince's palace with its buildings, gardens, and the gateways to the town

[Then follows his explanation or key to the plan]

This garden is nearly quadrangular Two of the sides abut on the river and the others face the country side Each side is about 500 ordinary paces in length It is surrounded by a high wall ornamented with several little pleasing towers and is divided into five large sections by high thick walls There are some very charming buildings to be seen in which are different kinds of rooms with very well constructed arches and arcades of which some are painted or gilded and others made of wood that has been carved all being supported upon thick octagonal or round pillars some of wood others of stone and even of copper Each separate garden has its fountain from which water flows through pipes which are skilfully arranged to cross each other These (i.e. fountains) are made of marble or alabaster or blue and white stone ornamented with a variety of figures cast in bronze such as lions dragons and other animals In short these gardens are a wonder and are well worth seeing

The chief discrepancy between Marshall's and de Graaf's account is that, while Marshall says two sides of the garden faced a "great tank" (possibly the *jhīl*), de Graaf says two sides looked on to the river and the other two faced the country side and this is what his plan also seems to show. Otherwise they were evidently describing the same site. When however, we come to compare with these two accounts Buchanan's plan and detailed description of what he calls the *Sangī dālān*, it seems as if we were dealing with a different site altogether. These difficulties can only be properly investigated on the spot.

William Hodges, the artist, who accompanied Warren Hastings on his journey to Benares in July—August, 1781, appears to have made no drawing of the ruins of Shujā's palace. He writes, however, in his *Travels*(4) —

"There yet remains a part of the palace which was supported by vast octagonal piers, raised from the edge of the river. The great hall(5) yet remains, with some lesser apartments, as well as the principal gate(6) leading to the palace these are surrounded by immense masses of ruins. This palace, in the time of Sultan Sujah, was nearly destroyed by fire the *zanamah*, or that part inhabited by the females of his family, was totally destroyed.

" .. At a little distance from Ragemahel are the ruins of a *zanamah*,(7) which I went from curiosity to inspect, as they are when inhabited sacred places "

(4) *Travels in India*, London, 1793, pp 21—22. His *Select Views in India*, published in 1786, contains pictures of

(1) The Gate of the Carvan Serai at Ragemahel,

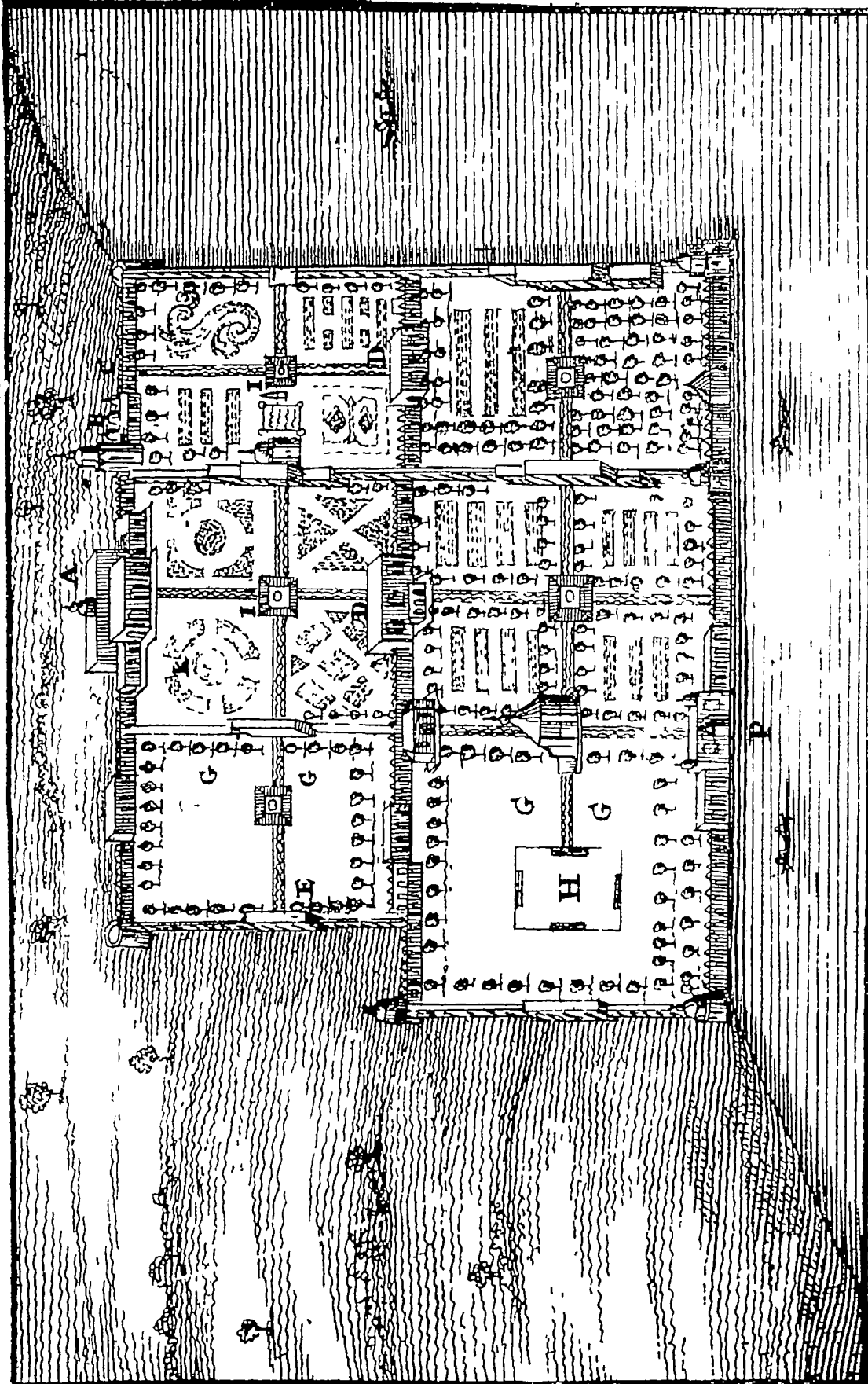
(2) Mosque at Ragemahel [? The *Jāmi'* Masjid of Mān Singh],

(3) Bridge over Oodooanulla,

(4) Pass of Sicrigully

(5) (6) Possibly Buchanan's "great house" and "gate A," respectively

(7) Was this the *Phūlbārf*?



't Hof ende Thajyn vande Prins Sajaefa. tot Ragiemohol.

PALACE AND GARDENS OF SHAH SHUJA' AT RAJMAHAL,
AS DRAWN BY NICOLAS DE GRAAT

EXPLANATION TO PLAN.

(AS GIVEN BY DE GRAAF)

- A Building on the back wall, with pumps and a raised reservoir from which water flows to the fountains
- B Octagonal tower, which the Prince ascends when he makes the elephants fight
- C Bath-house with three towers, where he goes to bathe
- D Large halls, with their fountains, along the middle wall
- E The hall of audience, where he goes to receive obeisance in the morning
- F The women's apartments, which are on the side of the town and the Dutch factory
- G Large empty spaces planted around with trees and ornamented with pleasure-houses on all sides
- H Large tank, to which stone stairs descend on the four sides
- I Reservoirs, with water-channels in the form of a cross that carry water through the garden
- K The central garden, which is ten feet higher than the others, and is vaulted and full of water-channels underneath

NOTE —The " P " on the plan should apparently read " F ".

APPENDIX 3

Invalid Thanas

In his three still extant Journals Buchanan often mentions invalid thanas usually associating with them the name of Colonel Hutchinson. As these institutions have long since been abolished and their history is not generally known a brief account of them may be given.

Early in 1778 Captain James Browne, who had been in charge of the Jungleterry districts since 1774, submitted to the Board specific suggestions⁽¹⁾ for improving the system of control over the hill areas. Towards the end of his recommendations he wrote as follows —

Most of the Sepoys in the Company's service have originally been husbandmen and their families still follow that method of life in and beyond the Company's territories. I beg to submit it to your consideration whether it would not be for the advantage of Government to publish through the invalid corps of Sepoys that whoever among them will settle on the lands between the Hills and the Sudder shall have small Jaghiers given for that purpose for the subsistence of themselves and families who are to be brought thither—This would afford the prospect of a comfortable maintenance to old soldiers worn out in our service and would establish a kind of militia whose possessions being interspersed among those of the Malguzarry tenants would keep the whole in safety from the Mountaineers' feudal service might also be enjoined from them if approved of.

In a letter dated the 10th March 1778, the Supreme Council expressed their warm approval of this proposal in these words]

We are much pleased with the plan which you recommended of granting Jaghier lands to the invalid Sepoys and desire you will carry it into immediate and effectual execution.

Here we have the genesis of the invalid thānās or jagīrdārī institution as the organization was also called and let us remember that the system so excellent in its original conception and so suited to the area in which only he intended to apply it was initiated by James Browne whose important services were so largely forgotten after Augustus Cleveland came on to the stage.

(1) See his *India Tracts* 1788 where these proposals are printed in the *Supplement* at pp. 73—88.

In the following year (1779) the Collector of Bhagalpur, then Mr Barton, was directed by Warren Hastings to introduce the proposed system, and he proceeded to take up lands for the purpose, an allowance (*rasūm*) being subsequently made to the zamīndār responsible for the Government revenue. In 1782 fuller directions were issued to the Collector, now Mr Cleveland. He was instructed to select healthy sites for the settlements, and the quantity of land to be granted to each Indian officer and sepoy was laid down on a fixed scale. In the case of the infantry the areas varied from 200 bighās for a subadār to 40 bighās for a sepoy, and in the case of the cavalry, from 300 bighās for a risāladār to 50 bighās for a trooper. The scale appears to have been altered later, as Patna records⁽²⁾ mention 600 bighas as given to risāladār, 400 to subadār, down to 80 bighās granted to a sepoy, under a Regulation of 1789. Gratuities were also granted to enable the grantees to meet the initial cost of bringing the lands under cultivation. In fact as the system became extended various changes of practice were introduced, which need not be detailed here.

As will be clear from Captain Browne's original proposal, the intention at first was to take up lands on the outskirts of the hill country, to the south of the Ganges, but subsequently settlements were established to the north of that river, and later on the system was extended into the Monghyr, Patnā, Shāhābād, Tihut and Sāran districts. The system had expanded far beyond its original scope, increasing difficulty was felt in finding lands that could be appropriated to such settlements, and the question arose of calling a halt. Besides the dearth of suitable lands in healthy localities, it was contended that the invalid men had not proved successful as cultivators. Moreover, as conditions became more settled, the state of affairs that had suggested the arrangement was fast disappearing: the plains people were no longer in constant dread of raids by the mountaineers. A Regulation of 1821 put an end to further grants. Thereafter resumption proceedings dragged on for many years. Traces of these old 'invalid thānās' may still be found all over the alluvial tracts in South Bihār, in the name *Inglis*, i.e., English, added to the names of hamlets or blocks of lands. In the settlement records such lands are frequently found entered as *jāqir inglis*. In the last Survey and Settlement Report a list is given of 25 such thānās in the Bhāgalpur district.

(2) See J. F. W. James' *Final Report, Survey and Settlement, Patna District* (1907-12), p. 33.

The supervision of this widespread organization required the services of an experienced officer, who was known as the Regulating Officer of the Jāgirdār Institution and this office continued to be in existence till the middle of last century. For many years the incumbent was John Hutchinson who is frequently referred to by Buchanan in his Journals as Colonel Hutchinson. Born in 1751-52 he entered the Company's Bengal Army as a country cadet in 1770 (3) but did not attain the rank of Lt. Colonel till 1800. He died at Bhāgalpur in 1807. He appears to have been succeeded in the charge of the Jagirdar Institution if not directly at least very shortly afterwards by Colonel Hugh Stafford who had joined the Bengal army in the same year as Hutchinson but outlived him attaining the rank of Lt. General in 1814 and dying in Calcutta in 1819.

(3) According to Dodwell and Miles; 1771 according to Major Hodson (II 512)

APPENDIX 4.

Sakrigali and Teliyagarhi.

As in other cases, I have retained in the notes the spelling of these names adopted on the Survey sheets. It is a question whether the current spelling is not incorrect in both these cases. Taking the case of Sakrigali first, Ives⁽¹⁾ in his description of Eyre Cootes' pursuit of Law and his troops after the battle of Plassey, spells the name "Sicari-gully". Rennell, on his maps "Siclygully". Sherwill, the Revenue Surveyor, spells it Sikree Gullee, Buchanan, in his Journal, writes Sikuigari", and in his *Index of Native Words* he gives Sikri—शिक्रि (*sic*). In old correspondence dating back over a century the name is sometimes written Sikree Gurhee. The original name was very likely Sikhariḡaihi (शिखरी गढ़ौ), meaning the 'little fort on the hillock'. The word *Sikhari* means a small hill. It is the same word that we find in Fathpur Sikhai ('Fatehpur Sikri'), Akbar's town near Agra. It is perfectly clear from the way the name has been transliterated by scores of old travellers that the first vowel in the first part of the name, as locally pronounced, was a short *i*. If this be so, the suggested derivation of the name from *sakrā*, 'narrow' and *gali*, 'lane' or 'defile', would seem to be fairly ruled out. That there were fortifications at this corner of the hills (as well as at Teliyagarhi) we know from John Marshall's diary "Here are the ruins of old Forts and bulwarks"⁽²⁾. In 1781, Hodges saw the remains of "a strong wall and gate"⁽³⁾.

In the case of Teliyagarhi, the second part of the name is admitted on all hands to be गढ़ौ, meaning a 'small fort', although in the old accounts, records and maps we constantly find it also spelt "gully" (e.g. "Terriagully", on Rennell's maps). The explanation of the name generally accepted is that which was given in Hunter's *Imperial Gazetteer* (and repeated in the 1908 edition), namely, that

(1) *John Marshall in India*, Oxford, 1927, p. 118, under date 14th May 1671.

(2) William Hodges, *Travel in India*, London, 1793, p. 22.

(3) Edward Ives, *A Voyage from England to India*, London, 1773, p. 160. The account given by Ives must have been based on some original diary.

the fort which seemed never to have been completed, was constructed in the 18th century by a Telī zamindar who was forcibly converted by the Muhammadans. This explanation seems to have been founded upon a statement made by Buchanan. But it was in the time of Mān Singh at the end of the 16th century, that the area including the site of the fort is supposed to have been confiscated from the Naṭ Paharīa chief who opposed his advance and made over to two Telīs who rendered him assistance. The fortifications at this pass however date from a period long anterior to Mān Singh. There was a fortress at this site then known as Garhī as early as 1536 (and doubtless still earlier) which is referred to by the Muhammadan and Portuguese historians. When Sher Shāh advanced against Maḥmūd, king of Bengal in that year his troops were held up at Telīyāgarhī by the Bengal forces assisted by some Portuguese. He turned the position by marching through the hills to the south just as Mir Jumla did in 1659 and Bālājī Rāo the Marāṭhā did in 1742/3. Two years later when Humāyūn advanced against Sher Shāh who was then in Gauṛ the latter sent his son Jalāl with some 10 000 troops to hold the defile of Garhī which is the only passage to the countries of Gauṛ and Bengal there being no possibility of penetrating into those countries by another road. Guns were posted on the hills and the gate held. After a daring sally in which he surprised the Mughal army threw them into confusion and looted their camp Jalāl closed the gate, and resisted the numerous army of Humāyūn for the space of one month. (4)

De Barros (1496-1570) in his *Asia* tells us that the king of Bengal had a fortress there in the narrow passage through which the Ganges issued as a defence against the people who inhabit those hilly tracts, so that they are not able to enter [the Kingdom of Bengal] either by land or river. In Lavanha's map that was published with de Barros' history and is the earliest map (circa 1550-52) of Bengal extant the site is marked as Gorij which represents the Portuguese pronunciation of the name.

Next we have the account of Gṛhī in the *Āin-i-Akbarī* where it is described as the western limit of the ṣūba of Bangala and the old *pargana* of Garhī is named as one of the *maḥals* of *sarkār* Lakhnauti in Todar Mal's rent roll (1582) (5).

(4) A full and interesting account of these operations is given by Ni'matullah in his *Makāsīm-i-aṣṣāʿiyya*. (See Dorn's translation I 113-115.)

(5) *Āin* II (Jarrett's translation) p. 152.

Strange as it appears at first sight, under *sarkār* Munger we are told that in that *sarkār* "a stone wall has been built extending from the Ganges to the hills, which they consider as demarcating the boundary of Bengal." This can only refer to the fortifications at Teliyāgarhī, which lay at the boundary between *sarkār* Lakhnauti in *sūba* Bengal and *sarkār* Munger in *sūba* Bihār. If Abul-fazl had written "on the eastern boundary of the *sarkār* (of Munger), there could have been no question of the site referred to

Again, in 1659, Shāh Shujā' when being pursued by Mīr Jumla, made a stand for some time in this neighbourhood, and, we are told, built a wall from the river to the southern hill; which possibly only means that he rebuilt or strengthened the old defences. Mr J N Sarkar, (6) taking the description, namely "Rangamatī, 33 *kos* from Mungīr and 15 *kos* from Rājmahāl", given in the '*Ālamgīrnāmā*', thinks that the place meant was "undoubtedly *Lālmattī*, half a mile south of the Sāhibganj station". But there are places called *Lālmattī*, or *Lālmattiyā* (a common name in areas where red soil is found) near Teliyāgarhī also, e.g., some 2 miles south-west, and about 2 miles south-east thereof. "Āqil Khān, however, gives the name Garhī, i.e., Teliyāgarhī (7). Moreover, the distances given in the "*Ālamgīrnāmā*" fit the Teliyāgarhī site better than a site further east, it being just about 30 miles, or 15 *kos*, by the old road from Rājmahāl. In addition to these reasons for regarding the Teliyāgarhī pass as the site defended by Shujā' we have the invariable local tradition associating his name with the fort there, a tradition that Buchanan also records (8), and, finally, there are the obvious strategical arguments that must point to this site as the one that would be defended first by any force retreating eastwards by the side of the Ganges, round these hills. Furthermore, we have no record that I can discover of the traces of a 'wall' or fortification from the hills to the Ganges at Sāhibganj.

The story, then, of the fort having been built by a Teli zamīndār in the 18th century appears to be, like so many local explanations of names, a concoction by some person ignorant of the history of the neighbourhood. The suggestion to derive the name from the Hindī word *teliyā*, meaning dark

(6) *History of Aurangzīb*, II, 241

(7) Not Sakrigali, as thought by Dowson (see Elliot, *History of India*, IV, 367, note (2))

(8) In his Report he writes definitely that Shujā built a footress there

(lit. oily) is not compatible with the genius of the language and may be omitted from consideration. It seems more reasonable on the other hand to interpret the name as describing the situation of the fort which at once strikes the observer at the foot of the hill for as Buchanan graphically puts it here the hills descend to the river a side for about a mile and their roots have been occupied by a fort. *Taliya* is the common vulgar pronunciation of *tālā* (Sansk. तल) also *tard* the lowest part base &c. *Taliyāgarhi* would thus mean the little fortress at the foot (of the hill)—just what it is. The spelling of the name as *Terriagully* *Terreeagurhee* &c. also tends to support this explanation as *tard* and *tare* are forms commonly heard for *tālā* and *tale* (at the foot of below) *r* and *l* being so constantly interchangeable. *Terī* on the other hand is a form never used for *Telī* an oilman. So if *Sikharīgarhi* be the original form of the name of the site at the eastern end of the narrows meaning the little fort on the knoll *Taliyāgarhi* was probably the original name of the fort at the base of the hills at the western end.

APPENDIX 5.

Dakra Nala.

The ruins still standing of the old bridge over the Dakrā nālā in spite of Buchanan's somewhat disparaging comment, present one of the most picturesque sights in the district⁽¹⁾ As they have been the subject of some misconceptions it seems desirable to record the following details. The bridge was built entirely of bricks laid in a tenacious mortar, and not of stone, as has sometimes been supposed. But the commonest error, which appears in nearly all accounts of the bridge, is that it was destroyed by Qāsim 'Ālī Khān when being pursued by Major Thomas Adams in 1763.

Arthur Bloome, who is generally so accurate, writes⁽²⁾ of "the bridge over the Dakra Nullah, which had been broken down by Meer Kossim Khan's order to retard the pursuit." The *Gazetter* repeats Bloome's version. Caraccioli, when describing the capture of Monghyr by Adams, ⁽³⁾ writes that Captain Stibbert was sent forward "to throw a bridge over Shinga nulla [i.e., Singhiyā N., three miles beyond Dakrā N.]; and in the meantime people were sent to repair the bridge at Dura-nulla [i.e., Dakrā N.], that had been cut by the enemy to retard our march." Captain John Williams, who, there is good reason for believing, was at the time serving as a private in the "Mairnes", as Wedderburn's Volunteers were called, gives the following account —⁽⁴⁾ "Cossim Ally having broken down an arch of the bridge over the Dacca Nulla, he [Major Adams] was detained one day in laying planks for the army to cross." Adams, in his Army Order Book of this campaign, from which Caraccioli's account was possibly taken, under date 11th Oct 1763, wrote ⁽⁵⁾ "People to be sent immediately to repair the bridge at Dacca Nulla. The engineer to set

(1) For a clear photograph of the ruins as they stood in 1910, see *Bengal Past and Present*, Vol VI, p 130

(2) *History of the Rise and Progress of the Bengal Army*, 1850, p 390. Bloome quotes as his authority the *Siyar-ul mutākhharin* of Ghulām Husain

(3) *Life of Lord Clive*, 1777, Vol I, p 329

(4) *Historical Account of the Bengal Native Infantry*, 1817, p 17,

(5) I O Orme MSS, India, VII,

people to repair the breach and to get the gun up that is fallen in. In his *Journal* under date 30th Sept 1763 Adams notes that Mr Swinton [i.e. Lieut Archibald Swinton] who had gone ahead to reconnoitre the Monghyr fort was informed that Qasim Ali Khān and his troops were at Surajgarā and that the bridge over Dacry Nullā was broke down for certain. Archibald Swinton in his diaries so far as these are yet available (6) does not refer to the subject of the bridge. It will be noticed that neither in his Order Book nor in his *Journal* does Adams mention that the bridge was intentionally destroyed by Qāsim Ali. By doing so he would have cut off the retreat of the large force left in the fort to defend Monghyr which was at the time his capital. Though he had himself decamped from Monghyr at the approach of Adams' force he had left Arab Ali Khan with a numerous garrison to hold out there.

But most important of all in this connexion is the record contained in Major Caillaud's diary (7) kept during his campaign of 1760-61. Describing the march from Ghorghat to Dākā nālā under date 13th Feb 1760 he writes:

The troops passed 4 nullahs. Over the two first are good brick bridges over the 3rd one of branches etc. and over the 4th at Deckria Nullah [i.e. Dākā nālā] is one of brick but so much broke in many parts as to render it quite useless for carriages but still fit for foot passengers. The artillery and heavy baggage obliged to pass the nullah at the Ford a little to the right of the bridge. From this account it is perfectly clear that the old bridge had been broken and in many parts before Qāsim Ali's time and that in Feb 1760 Caillaud was unable to use it for carts let alone guns. It had probably been repaired again before Qāsim Ali fled from Monghyr to Patna at the end of September 1763. It may have been damaged during its use on that occasion but Adams' order of the 11th Oct reads as if his guns were also being taken over it when one broke through and fell into the river. At all events it is pretty clear that Qāsim Ali had not had it blown up and that it had been in a broken down condition at least 8½ years earlier.

By whom this fine old bridge was originally built we have no record to show. Judging from the kind of bricks used and the peculiarly strong mortar employed both of which recall the fabric of the old *Damdām Kōhī* in the fort

(6) *Swinton Family Records and Portraits* 1908 (privately printed.)

(7) I O Orms MSS India VI Caillaud's *Journal in Bengal*.

(where the Collector's house now stands) I am inclined to the view that it dates from the time of Shāh Shujā's vice-royalty (1639-59) *Dākar*, in Hindī, means a stiff dark clay soil. The detritus from the neighbouring hills carried down into the river bed has no doubt caused a deposit of such clay. The word *dākar*, in accordance with a general rule, becomes *dakarā* in the vulgar tongue and this is the origin of the name, which is locally pronounced *Dakarā nālā*.

APPENDIX B.

Monghyr Sites

THE HILL HOUSE — Looking up from the road below at the house so picturesquely poised upon the south-eastern spur of the Pir Pabai hill the architecture—for example the central dome and the light columns that support the verandah roofs—at once suggests Muhammadan influence. When Nawab Qasim Ali Khān made up his mind to consolidate his power and make himself independent of the English Company one of his first measures was to move his headquarters from Murshidabad to Monghyr regarding the latter as a site better suited to his plans. Here he established himself in 1761-63. The most remarkable man in his service at the time was an Armenian named Khojah (i.e. Khwāja) Gregory brother of Khojah Petrus who also played an important part in the history of the period. These two men were the sons of Khalanthar Arratoon an Armenian merchant of Julfa the suburb of Ispahan. Khojah Gregory became Qasim Ali's right hand man his chief minister and also his commander-in-chief. The name Gregory was corrupted in pronunciation into Gurgin and in the histories of the time we find him nearly always referred to as Gurgin Khān. He was a man of great ability and power of organization as well as of high character as we know from the warm tribute of esteem paid him by J. B. J. Gentil the French officer who served under him and won his friendship⁽¹⁾. The fort defences were repaired and an arsenal established at Monghyr cannon cast small arms of superior quality and ammunition manufactured⁽²⁾ the troops were armed trained and disciplined on the lines of the Company's forces. European officers and men being enlisted in fact it was due to him that Qasim Ali's army was by far the most formidable opponent that the Company's troops had till then encountered. There has never been any local tradition at Monghyr as to where he lived. In the *Siyar ul mutākharrin* however Ghulam Husain tells us that when

(1) For Gentil's opinion see my article on *The Murder of Gurgin Khān in Bengal Past and Present Vol. xxix (1925) pp. 219-22.*

(2) Thus was established the gun-making industry for which Monghyr has ever since been noted.

Henry Vansittart went to visit Qāsim 'Alī towards the end of 1762, the Nawāb went out 3 *kos* to Kodarkana (Rennell's 'Coodiacutta') to welcome him, and assigned him for his residence the building which Guigīn Khān had constructed on a hill at Sītākund, and then taking leave went to his own quarters in the fort (3). In a letter to the Council, dated Monghyr the 1st Dec 1762, Vansittart writes that he had arrived the previous day at the quarters prepared for him by the Nawāb "about Two Miles from the Fort of Mungeer", thus clearly corroborating Ghulām Husain's account—his "hill at Sītākund" being obviously the Pīr Pahāi hill. It may be regarded as established, then, that this 'Hill House' was built by Guigīn Khān in 1761-62 and thus its architectural features are explained. After that time the house appears to have been generally occupied by the senior military officer commanding the brigade, the headquarters of which, under Clive's arrangement, was Monghyr. We know, for instance, that Col Peach lived on "the Hill" in 1770. It is marked as the "Hill House" in Rennell's large scale sheet of 1773, and on Plate XV (1780) of his *Bengal Atlas*. When Thomas Twining visited Monghyr, in the suite of Sir Robert Abercrombie, in 1794, it appears to have been known as the "Belvedere" (4) house.

This is the "Hill House" referred to by Buchanan, but that name has long since been dropped—it is now always known as the Pīr Pahāi house. On the other hand, the name 'hill house' has often been applied to the fine house built on the rocky eminence in the NE corner of the fort, known as Kainachaurā ('Kaina's platform'). This house, which Buchanan, in his Report, describes as "by far the handsomest building" he had seen in the course of his survey, was built by the famous General Thomas Goddard, the hero of the march across India (1778-79) against the Marāṭhās. Goddard had, previous to that campaign, been commandant at Monghyr. It was in this house that Warren Hastings left his wife when he started on his fateful journey to Benares in 1781 (5). It was Goddard also who gave his name to one of the *mahallas*, or wards, of the town, which Buchanan correctly spells Gārai bāzāi, known now as Garden bāzāi, the origin of the name being forgotten. The

(3) *Siyar-ul mutāḥharīn*, Lucknow edition, pp 715—16

(4) *Travels in India a hundred Years ago* (1893), p 130

(5) The occasion of Chait Singh's rebellion,

Indian pronunciation of Goddard's name was Garar or Garad and the old 17th Battalion (afterwards 13th N. I.) raised by him in 1764⁽⁶⁾ was always known as *Gārad* (anglice Gaurnd) *ka paltan*

Another of the Monghyr mahallas namely Betman bazar mentioned by Buchanan (7) is called after Nathaniel Bateman who was appointed Supervisor of the then district of Monghyr in 1769 one of the earliest civil officers deputed to this charge

Buchanan's Chook or Wesly bazar is the modern Chauk or Woshi (चौकी) bazar. A local officer has suggested that the original name was probably Worsley but I can find no record of any person of this name having been at Monghyr before Buchanan's time and suspect that it is a corruption of Wellesley

A full account of de Graaf's description and plan of the Monghyr fort has been given by me in *Bengal Past and Present* Vol XXVII (1924) pp 154—63

(6) Williams *Bengal Native Infantry* p. 101.

(7) See list of *mahallas* on Buchanan's map

APPENDIX 7.

Rhinoceros and wild Elephants.

After leaving Rājmahāl, under date 7th January 1811, Buchanan refers to a low hill about a mile in length lying due west of Musahā, and adds "Between it and the great hills is a large *jhil*, the principal haunt of the wild rhinoceros" This hill is not shown on the 1 in = 1 mi Survey map just as Buchanan describes it, and the line showing the "boundary of the Gangetic inundation" indicates the origin of the *jhil* that existed there In his Report he has stated that in most of the wild parts of the district the rhinoceros was "occasionally, but very rarely, seen", that formerly there were many in the marshes at the foot of the hills between Rājmahāl and Sakigālī, and even in his time there were some there, but they had been much disturbed by sportsmen and had become scarce and exceedingly shy

Captain W S Sherwill, in his General Remarks on the Revenue Survey of the then Bhāgalpur district (1846-50) mentions both rhinoceros and wild elephant as still to be found Mr E G Man, who had served several years in the Sontāl Paiganas, wrote in 1867 (1) "Tradition says that wild elephants and rhinoceros were abundant some twenty years ago, now the latter are quite extinct" In the *Statistical Account* of the Bhāgalpur district, published in 1877, it is recorded (2) that "rhinoceros were formerly numerous in *pargana* Nāthpur, whither they used to wander from the neighbourhood of Jalpāigui One or two are still sometimes seen, but very rarely" These animals are no longer found in any part of the Bhāgalpur area surveyed by Buchanan

As regards wild elephants, these were comparatively numerous in Buchanan's time He refers to them in many localities, e g, near Kaihariā, near Dumkā, between Nalhati and Birkheti, in the hills near Bilābāi (to the west of Farakkā), near Rājmahāl, and to the south of Pīrpāntī He tells of a village between Birkheti and Pānchūān being abandoned owing to their frequent depredations In his

(1) *Sonthalia and the Sonthals*, Calcutta, 1867, p 183

(2) *Statistical Account of Bengal, Bhagalpur District*, 1877, p 43

Report he refers to a colony of them to the north of the Ganges. These had probably roamed in from the Tarāi jungle as we know they did into the Purnea district. In fact Mr J Beames mentions⁽³⁾ that up to 1866 a large estate in the Sultanpur *pargana* of the Purnea district was held revenue free on the tenure of maintaining an establishment for the capture of wild elephants.

W S Sherwill in his account of the Sultanabad *pargana* (now in the Sontal Parganas) writes ⁽⁴⁾

The jungles were formerly well stocked with wild elephants five of which alone remain at the present day (1850) having been either captured or killed. These animals create much alarm in the villages lying along their beat which extends for fifty miles in a westerly direction along the base of the Rajmahal Hills and the base of their out-liers in Zillah Beerbhoom. Several villages in Tuppeh Kundtkarayeh Zillah Beerbhoom have been lately deserted on account of these animals, so though they do not take life take great liberties with the Sonthals huts which being probably covered with leguminous or cucurbitaceous creepers tempt the animals to destroy the fragile huts for the sake of their verdant covering which they devour with great avidity. These animals are also said to devour any store of grain they may find in the destroyed huts.

Mr E G Man in the work already quoted referring to wild elephants in the Sontal Parganas writes —

but three specimens remain—the last remnants of the many herds of days gone by. One of these three is by common report a magnificent animal. While riding through the jungle at the beginning of this year [? 1866] I came across his tracks and measured the size of their marks in the mud with a pocket handkerchief. The circumference of the print of one footstep measured was over four and a half feet which would make him about nine feet high for twice round the foot is a sure standard of the height. The neighbouring villagers informed me that the three were inseparable and had contracted a liking for parched grain. They used therefore to enter a village at one end which was the signal for the inhabitants to vanish at the other and after inspecting the shops for any delicacies that might tempt them they would finish up by pulling down a house or two for recreation and then quietly retire.

Mr Browne Wood notes in connexion with his settlement operations carried out between 1873 and 1870 that several villages had been abandoned owing to the depredations of elephants.

Was Man's magnificent animal the last wild elephant in the district which was shot in 1893⁽⁵⁾? In his Report

(3) *JRAS* 1896 p. 61.

(4) *General Remarks upon the District of Bhagalpoor* p. 24.

(5) *Gazetteer Santal Parganas* (1910) p. 17.

Buchanan writes that " the stock is said to have been some that made their escape from the Nawab's stud " But such a story is unnecessary to explain the survival of wild elephants in these parts We know that they were at one time numerous in the forests of the eastern and south-eastern outlines of the Vindhya, and they are still to be found in parts of Orissa and the States to the south and west of Chutiā Nāgpur and there is no reason why their range should not have once extended into the hills of the Sontāl Paiganas

In his Report, Buchanan also mentions the *gaur* (Indian bison) as being occasionally seen in the wilder parts of the south of the district This animal, too, has since retreated further to the south-west, into the wilder areas, where it is still found in diminishing numbers in some of the States

APPENDIX 8

Balaji Rao's Route through the Hills.

Though the question of the route by which Balaji Rao's Marāṭhā army passed through the hills is of no great importance as Buchanan devoted a day's trip (6th January) to its solution and as his reference to Captain Browne's description is somewhat obscure it is desirable to add some details in elucidation of the views recorded by that officer and also of these expressed at an earlier date by Mr J. Z. Holwell.

Buchanan tells us he endeavoured to trace the route taken by the Marāṭhas by the description given by Captain Browne. With this object he went to a hill village called Chaundi (Chamdi on S.S. 72/0-12) which lies inside the Rājmahal hills about 10 miles W. by S. from Rājmahal Railway Station and after making such inquiries as he could from the local people who were anything but satisfactory witnesses according to his account of them he was disposed to think it was by the Chamdi route that the Marāṭhās had come. He seems to have been led to this conclusion largely by the fact that near this road he saw many heaps of stones and on asking the Majhi what they meant he said that long ago an army came that way and had ordered the stones to be thrown off the road in heaps but he could not tell what the army was.

By Browne's description is evidently meant that contained in his *India Tracts* published in 1788. Browne states (p. 12) that one Marāṭhā army at least went by the route called Morrison's pass which leads from Jumnee and enters the south west angle of the cluster of hills, called the Rājmahal hills near a village called Dowdaund about thirteen coss E. N. E. of Luchmipoor this pass leads to Patchwarrah in Sultanabad which is twenty-one coss distant only, and is the road by which the Mahrattas once entered Bengal.

Further on he writes — The pass by which Mr Holwell says that the Mahrattah Chief Balaji Row entered Bengal from the plains of Colgong is situated in the Toppe of Minneharry it is called Choonteash and enters the hills near the village of Mowwarrah from hence to Mudgud.

which lies in the valley between the Minnehairy and Rajahmahal Hills, is nine coss at Mudguah is a lake of water, from thence after passing the remainder of that valley, you ascend by a very good road the Rajahmahal Hills, and come into the plains west of Nagaisaibang by the pass called Chowndy, the nearest village is called Nowgyh." He then adds.—"Mr Holwell's speaking of this march as a difficult achievement is matter of surprise to me; as by the accounts of many people with whom I have conversed, and who were residents on the spot at the time of the passage of Balajee Row's troops, the road was then so well known and frequented, that the Birmans used to drive then loaded bullocks through it, to avoid the duties paid at Tilleagunry [which road is meant here, whether that via Jumnee and Dowdaund, or that via Mowannah and Chowndy, is not clear probably the latter is intended]—They further say, that the man who conducted the Mahiattahs from Colgong through the hills, was one of the Chokeydars of Minnehairy, and that his name was Dudunsing—Mr Holwell says he was a peasant of Colgong, and that Balajee Row gave him a lack of rupees reward, this is not confirmed by the people in this quarter, for they say the man died sometime after very poor near Oudwa Nullah."

Browne then expresses regret at having to correct "so respectable an authority as Mr Holwell," pleading his "minute local knowledge" of the parts concerned. It will be obvious from the above that Buchanan went to Chamdi, not because Browne thought the Mañāthās had gone that way, but because Holwell (according to Browne's version) was of that opinion. I shall refer to Browne's own view, which is not clearly expressed, later.

From what source Browne ascertained the views which he ascribes to Holwell, I have hitherto been unable to trace. Holwell refers to the subject at some length in his *Interesting Historical Events*, etc, published in 1766 (see First Part, p 138 f and the map no 2). Briefly put, he there says that Bālājī, when "in the neighbourhood of Boglypore" (i.e., Bhāgalpur, the exact place not being specified), made inquiry about a passage through the hills, and "an old peasant an inhabitant of Colgong hills" undertook for a reward of one lakh to guide the army through the hills. The route followed is thus described—

"... at first Westward, a point or two Southerly, until he found a pass, which he sought for about the center of the range of

the Colgong hills. This pass being found it was his mark for the remainder of the expedition and he carried them through it by very practicable roads with much facility until the mouth of it opened upon the level country between the Colgong and Telliagurry hills. From hence his course was due South which led to the second pass through the last mentioned hills the pass be accomplished with equal ease and from hence for two days he crossed the level country that lies between the Telliagurry and Rajmahal mountains shaping his course about South East at night he told the General he must halt until the morning sun appeared—In the morning he led them due South and in the evening of the same day entered a pass which guided them through the Rajmahal mountains and landed the whole army without the loss either of man or horse in Bengal on the plains West of the city of Rajmahal at a little town called Banian Gang. Having performed his obligation in six days from leaving Bogulpore (more commonly by the English called Boglypore) through ways until this period deemed totally impassable.

It will be noticed that there is here no mention of Choonteah Mowarrah Mudguah Chowndy Nagarsarbang or Nowgyh Holwell in fact in this account gives no names of towns except Boglypore and Banian Gang. At first sight it might appear that his Banian Gang was Rennell's Bannagong the modern Beniagrām but this place was and is twenty miles south by east of Rajmahāl and Holwell distinctly states that his little town Banian Gang lay *west* of Rajmahāl. There is no Banyagaon or Beniagrām to the west of Rajmahal near the foot of the hills but there is a village called Bhamungaon on the old Rev. Sur map and Bamangawan on the modern S.S. (72, $\frac{1}{2}$) about one mile to the north west of Tinpahar junction on the Loop Lane and about seven miles west by south from Rajmahal. This village lies about three and a half miles east-south-east from Chamdi on the plains below the hills and on the existing road from Majhua and Boro past Chamdi which most likely follows the old route. There can be little doubt then that this is the place Holwell meant by Banian Gang. On the other hand a reference to Holwell's map would lead one to suppose that quite a different locality was intended. Holwell however had no idea of map-drawing. All his maps are hopelessly out of scale and orientation. Browne was evidently guided by his minute local knowledge in interpreting the route which Holwell meant to describe and I think we may take it that he interpreted it correctly. As regards the places named by Browne Choonteah is not marked on any of the maps. It was in *ṭappa* Manihari that is to say in the north west corner of the present Goddā subdivision (for the position of this *ṭappa* see reproduction of Buchanan's map). It was near Mowarrah that is

Mahuara, two miles west of **Mandro**. By Mudguah is meant **Majhua**, two miles west-by-south of **Borio Bazar**. (As noted elsewhere, the old village of Majhuā in Buchanan's time, and before, probably occupied the site of the modern **Borio**). Chowndy is Buchanan's Chaundi the **Chamdi** of the S S Nagaisaibang is most probably the **Sagarbhanga** of the S S, rather more than a mile to the south-west of **Tinpahar R S**. Nowgyh is no doubt **Nawgaon** of the S S, about a mile or so to the east of **Bamangawan** (referred to above) and the same distance north by east of Tinpahā station.

Now let us revert to Browne's own opinion as to the route by which "the Mahrattahs once entered Bengal" (above, 3rd para). Jumnee and Dowdaund are both marked on Rennell's B A Pl II. Owing to the inaccuracy of Rennell's maps of these parts, it has been no easy task to identify these places. It may, however, be taken for certain that they are the Jumounee and Chatdeodand of the old Rev. Sui map, and the **Jamniphaharpur** and **Deodanr** of the modern Sui Sheets (72 $\frac{P}{6}$ and $\frac{P}{6}$), which lie four miles south-east and 14 miles south-by-east, respectively, from Goddā. From Deodāni onwards the route would follow the valley of the Bānsloi river, via the Pachuārī pass and thence past Maheshpur on to the plains. In fact the route here indicated by Browne appears to be clearly that marked as "Morrison's Route in 1767" on Rennell's 1773 sheet—A *Map of the south-east part of Bahar*, scale 5 mi = 1 in.

Taking Bhāgalpur to have been the starting point, the route via Mahuārā, Majhuā and Chamdi would be roughly sixty miles, while that via Deodāni would be upwards of ninety miles. Either distance could have been accomplished in six days by the Maiāthā troops, whose rapidity of movement was famous. Whether Browne, in the passage quoted above, intended to express the opinion that Bālājī Rāo had followed the Deodāni route is not clear. In saying that it was "a road by which the Mahrattahs once entered Bengal", he may have been referring to the invasion of Bhāskara Pandit, and his dissent from Holwell's views may only have been in respect of the alleged difficulty of the Mahuārā—Majhuā—Chamdi route, which Browne himself knew to be easily practicable for the Maiāthās. On the whole it seems probable that Bālājī came through the hills by the latter road, as Buchanan thought.

the Naga's fire-drill made of split stick and bamboo thong resembling that used in different parts of Indonesia, the Naga's double-cylinder vertical forge or piston bellows (so different from the skin bellows of most parts of India but) resembling that in use among the Kayans and Dyaks of Borneo and the Bontock Igorots, the practice of head hunting (human heads being now generally substituted in administered territories by *Misaka* heads, through fear of the British authorities) and the customs connected therewith resembling those in vogue among the Dyaks of Borneo and the Bontock Igorots and some other Indonesian tribes, the platform burial of the Ao Nagas similar to that practised by the Kayans of Borneo, the Naga's process of tattooing similar to that of some Indonesian tribes, the organization and customs connected with the Naga's *Morungs* or bachelors' dormitories so similar to those among many Indonesian tribes, the hoe culture of the Nagas resembling that of several Indonesian tribes and the system of terrace cultivation of the Angami Nagas so similar to that of the Bontock Igorots and certain other Indonesian tribes, — these and certain other artefacts and social customs and institutions have their counterparts in Indonesia rather than elsewhere.

The Naga people comprise about two dozen tribes — among the better known of which are the Aos, the Angamis, the Lohtas, the Semas, the Sangtams, the Tangkhuls, the Konyaks, the Changs, the Kabuis and the Kacha Nagas. In a few of these tribes the men go naked, but in many of them kilts decked with cowrie-shells are worn by the men particularly on festive occasions, and long or short skirts are worn by the women. One interesting point is the variety of modes of wearing hair in different Naga tribes, and similarly the assortment of colours of women's apparel differ in different tribes. The usual dress of the men is a small waist-cloth and a wrapper either of cloth or bark fibre round the body. It is the special privilege of men who have proved their prowess in war or their liberality in sacrifices and feasts to wear picturesque body-cloths of various beautiful colours. Their gala dress comprises attractive

gaycoloured head-dresses generally made of plaited cane or wicker-work adorned with crests of beautiful feathers, picturesque fillets made of bear's hair with gay plumes stuck into them, beautiful baldrics bordered with hair dyed in scarlet worn across the breast and terminating in a tail of human hair similarly dyed, gauntlets of coloured cloth ornamented with *cowie* shells and fringed with scarlet hair, armlets of ivory, and beautiful leggings of plaited cane, and their spears and *daos* with long handles beautifully decorated with hair dyed in red and black,—all these make an impressive show, which, so far as I know, cannot be paralleled by any other tribe or caste on the Indian continent

It is not only in their cultural affinities that the Nagas are connected with Indonesia, but their racial affinities too are with the Mongolian races of Indonesia. Though the Nagas are racially classed among the Tibeto-Burman speaking Mongolians, certain other ethnic elements must have entered into their composition. From the existence of curly hair in some individuals and small polished stone celts in some of their hills, the admixture of an early negrito stock has been inferred. And the comparatively dark colour and some other physical and cultural traits of the Konyak Nagas might appear to suggest a remote affinity with some tribes of Chota Nagpur. The erection of stone-monoliths and the practice of terrace-cultivation by some of the Naga tribes and the institution of the *morung* or bachelors' house are the prominent cultural features that the Nagas share with the "Kol" or Munda-speaking tribes of Chota-Nagpur and Central India. The "genna" taboos of the different Naga tribes have their counterpart among some agricultural and other taboos particularly those in connection with the Sarhul ceremony (both before and after it) observed by some of the Chota-Nagpur tribes¹

The Meithies of the Manipur State are a very interesting people and afford a good instance of the thorough transformation of an animistic hill-tribe into an orthodox Hindu caste. They still speak a language of the Tibeto-Burman group, and Mr. Hodson's investigations show that within two hundred

¹ Vide S. C. Roy's '*Oraon Religion and Customs*,' pp. 225-227.

the Naga's fire-drill made of split stick and bamboo thong resembling that used in different parts of Indonesia, the Naga's double-cylinder vertical forge or piston bellows (so different from the skin bellows of most parts of India but) resembling that in use among the Kayans and Dyaks of Borneo and the Bontook Igorots, the practice of head hunting (human heads being now generally substituted in administered territories by *Mithun* heads, through fear of the British authorities) and the customs connected therewith resembling those in vogue among the Dyaks of Borneo and the Bontook Igorots and some other Indonesian tribes, the platform burial of the Ao Nagas similar to that practised by the Kayans of Borneo, the Naga's process of tattooing similar to that of some Indonesian tribes, the organization and customs connected with the Naga's *Morungs* or bachelors' dormitories so similar to those among many Indonesian tribes, the hoe culture of the Nagas resembling that of several Indonesian tribes and the system of terrace cultivation of the Angami Nagas so similar to that of the Bontook Igorots and certain other Indonesian tribes, — these and certain other artefacts and social customs and institutions have their counterparts in Indonesia rather than elsewhere.

The Naga people comprise about two dozen tribes,—among the better known of which are the Aos, the Angamis, the Lohtas, the Semas, the Sangtams, the Tangkhuls, the Konyaks, the Changs, the Kabuis and the Kaohs Nagas. In a few of these tribes the men go naked, but in many of them kilts decked with cowrie-shells are worn by the men particularly on festive occasions and long or short skirts are worn by the women. One interesting point is the variety of modes of wearing hair in different Naga tribes; and similarly the assortment of colours of women's apparel differ in different tribes. The usual dress of the men is a small waist-cloth and a wrapper either of cloth or bark fibre round the body. It is the special privilege of men who have proved their prowess in war or their liberality in sacrifices and feasts to wear picturesque body-cloths of various beautiful colours. Their gala dress comprises attractive

gaycoloured head-dresses generally made of plaited cane or wicker-work adorned with crests of beautiful feathers, picturesque fillets made of bear's hair with gay plumes stuck into them, beautiful baldrics bordered with hair dyed in scarlet worn across the breast and terminating in a tail of human hair similarly dyed, gauntlets of coloured cloth ornamented with *cowrie* shells and fringed with scarlet hair, armlets of ivory, and beautiful leggings of plaited cane, and their spears and *daos* with long handles beautifully decorated with hair dyed in red and black,—all these make an impressive show, which, so far as I know, cannot be paralleled by any other tribe or caste on the Indian continent

It is not only in their cultural affinities that the Nagas are connected with Indonesia, but their racial affinities too are with the Mongolian races of Indonesia. Though the Nagas are racially classed among the Tibeto-Burman speaking Mongolians, certain other ethnic elements must have entered into their composition. From the existence of curly hair in some individuals and small polished stone celts in some of their hills, the admixture of an early negrito stock has been inferred. And the comparatively dark colour and some other physical and cultural traits of the Konyak Nagas might appear to suggest a remote affinity with some tribes of Chota Nagpur. The erection of stone-monoliths and the practice of terrace-cultivation by some of the Naga tribes and the institution of the *morung* or bachelors' house are the prominent cultural features that the Nagas share with the "Kol" or Munda-speaking tribes of Chota-Nagpur and Central India. The "genna" taboos of the different Naga tribes have their counterpart among some agricultural and other taboos particularly those in connection with the Sarhul ceremony (both before and after it) observed by some of the Chota-Nagpur tribes.¹

The Meithies of the Manipur State are a very interesting people and afford a good instance of the thorough transformation of an animistic hill-tribe into an orthodox Hindu caste. They still speak a language of the Tibeto-Burman group, and Mr. Hodson's investigations show that within two hundred

¹ Vide S. C. Roy's '*Oraon Religion and Customs*,' pp. 225-227.

years ago, in internal organization, in religion, in habits and manners, "the Meithies were as the hill people now are." The fact that when a Hindu Meithie of Manipur happens to be out-casted for some social or other offence, he has to take his abode in a Naga village and eat with his Naga neighbours and thus "start afresh," and the further fact that the Meithie Raja of Manipur is dressed like a Naga at his coronation, may perhaps be taken as indications of the affinities of the Meithies with the Nagas.

At the last *Dasakārā* or *Durgapūjā* festival at Imphal, the capital of the Manipur State, I was surprised to find a number of Meithies attending the ceremony with greater devotion than most Aryan Hindus, singing devotional songs with intense feeling and playing on the *suridong* drum. The principal Hindu deities to whom offerings and prayers are offered by the Meithies are Siva and Durgā, Rādhā and Krishna, and Lakshmi Nārāyan or Satya Nārāyan (that is, Vishnu); Gourānga or Sri Chaitanya—the Bengali apostle of Vaishnavism,—also receives homage. In addition to the Hindu deities whom the Meithies worship for "salvation" (*saṁkṛti*), as he says—he propitiates for safety or riddance from evils such as epidemics, etc., three classes of godlings named respectively as *Umag Las* (literally, forest gods), *Imung Las* or household gods and *Lam Las* or village gods. These three classes of godlings would appear to represent the animistic spirits of their unconverted days, now organised into three definite classes. The mode of their representation has undergone a change. The *Umag Las* are represented by images of human heads either male or female as the case may be, the *Imung Las* is represented either by a bell metal coin or merely provided with a bed and mosquito curtains, and propitiated with offerings of flowers. Whereas Brāhman priests are employed for the worship of the deities adopted from the Hindu pantheon, spirit doctors and magicians (*masāḍā*) of both sexes of their own tribe are still employed to appease the animistic spirits and perform magical rites and ceremonies to heal maladies, bring down rain, and drive away diseases and other calamities.

The tribe is divided into seven exogamous *Saleis* or clans whose origin is attributed, Hindu fashion, to different parts of the body of the *Gooroo* or the Lord of the Universe. These *saleis* are also sought to be identified with Brāhmanic eponymous divisions. Thus Angom *saler* (sub-divided into fifty *Yumnaks*) which is said to have issued from the right eye of the Gooroo is identified with the *Gousik* (Kausik ?) *gotra*, the Ningthonja *saler* (subdivided into fifteen *Yumnaks*) which issued out of the left eye is identified with *Sandilya gotra*, the Chengloi *salei* (subdivided into forty-one *Yumnaks*) which issued out of the right ear is identified with the *Bharadwaj gotra*; the Ngangba *salei* (subdivided into seventeen *Yumnaks*) which issued out of the left ear is identified with the *Narmis gotra*; the Looang *saler* (subdivided into fifty-six *Yumnaks*) which issued out of the right nostril is identified with the *Kāsyap gotra*; the Khoomon *saler* (subdivided into one hundred and three *Yumnaks*) which sprung from the left nostril is identified with the *Madhukulya gotra*; and the Moirang *saler* (subdivided into sixty-six *Yumnaks*) which sprung from the teeth of the Gooroo is identified with *Atreya gotra*. It may be noted that the process of transforming old totemestic clan names into eponymous names derived from Brāhmanic gotras is still in progress among the Hinduised Mūndās of Chōtā Nāgpur. Thus we find among them the totemic clan name *Kachua* (tortoise) being transformed into *Kāsyapa*, the clan name *Sāṇḍi* (bullock) into *Sāṇḍilya*, the clan name *Jōm Tūt* into *Bhōj Rāj*, and so forth.

It may also be noted that the Hinduised Mūndās of the Panch Parganas of the Ranchi District, who, like the Meithies of Manipur, have adopted the Vaisnav faith exhibit similar devotion to their adopted Hindu deities. The Meithies have, however, gone much further in Hinduisation and now divide themselves into three castes—viz., Kshatriyas, Vaisya and Sudras, although inter-marriage between these castes is still permitted. The Brāhman priests of Manipur are the descendants of Bengal Brāhmans who were introduced into the State towards the middle and latter end of the 18th century.

One most noticeable feature of Meithei sociology is the institution of the *Chak: Thaba* or *Chak: Thaba* (literally, Fall of the year, i.e., commencement of the year) On the day of the Chirouba (Charak Pūjā?) festival, at the end of each Manipuri year which terminates towards the middle of April, the *maibās* or diviners select and the Rājā appoints a new man as *Chak: Thaba*, after whom the ensuing year is named. The *Chak: Thaba* is the scapegoat of the Rājā and his subjects; all sins committed by them during the ensuing year are believed to be transferred to him and are acknowledged by him as his own Each Manipuri year goes by the name of the selected *Chak: Thaba* for the year Any man may be selected as a *Chak: Thaba*, except princes of the Royal family, Musalmans (Langals), Nagas, blacksmiths (Thangjams) and braziers (Kānsoms) But no respectable Meithei will agree to become a *Chak: Thaba*, so that generally a *Chak: Thaba* is selected from among the Lois who are regarded as the lowest class of Meitheis Though they have adopted Vaishnavism, the Lois still intermarry with the Nagas and sacrifice pigs and fowls to Sena Mehi and Imung Lai The outgoing *Chak: Thaba* addresses his successor as follows —“ My friend, I bore and received all the sins and evil spirits on behalf of the Rājā and his subjects for the out-going year, and I trust you will also do the same for the ensuing year, and henceforth bear the sins, diseases and misfortunes, etc., of the Rājā and his subjects until the next *Chirouba* comes” And the *Chak: Thaba*-elect addressing the Rājā, says —“ From to-day I will bear on my head all the sins, diseases, misfortunes, battles against thee, all ignominies, mischiefs and everything of bad omen and untoward for thee and thy kingdom.” The Rājā in appointing a new *Chak: Thaba* presents him with a Manipuri cloth (*mobang*), a basket of salt and a certain area (1 *pari*) of rent free land for cultivation for life besides granting him certain other privileges.

This last day of the Manipuri year is known as Chirouba. On this day, Meitheis will not engage in any work other than cleaning their houses, changing their old earthen utensils (*chappoos*) for new ones, cooking various kinds of choice dishes,

and enjoying themselves. New clothes are worn and offerings are made to the deity Senamahi.

Two interesting ceremonies of divination among the Meithies are the Rāvana-shooting and the *Kwāktalba* (*lit.*, chasing of the Crow) or *Khāg-jatra* (procession of the Crow), which I had the opportunity of witnessing at Imphal on the Dasahara day.

Shortly after midday on the Dasahara day, the Rājā with his courtiers and retainers march out on elephants and ponies in an imposing procession from the palace to a beautifully decorated arena where his military officers engage in sword play and perform various other feats of military skill. The *Senāpati* or commander of the forces is honoured by the Rājā with presents of clothes, and a salute of guns is fired. Then a number of military officers ride in procession to an open space where an earthen effigy of the ten-headed Rāvana of epic fame has been set up. One after another the officers shoot at the effigy from some distance until it is hit. The good or bad luck of the kingdom during the ensuing year is predicted from a consideration of the particular limb on which the effigy is hit.

Another party of officers or soldiers march in another direction where on some trees, crows are roosting. They shoot at the crows, and the direction in which the crows take flight is taken to point to the quarter from which danger to the kingdom may be apprehended during the ensuing year, and the *Senāpati* or General is required to keep a particular watch in that direction throughout the ensuing year.

Although the Meithies profess to be guided by the *Sāma Veda* of the Hindus in all their domestic ceremonies such as those at birth, death and marriage, it is the *māṭba* who is actually called in on these occasions, and sacrifices of pig and libations of liquor are offered in Naga fashion. Gennas are observed at different seasons of the year, and a rope-pulling genna is performed to avert all misfortune and sickness and to drive away spirits from the village. At these *gennas* the villagers abstain from certain kinds of work, and the *Māṭba* offers libations of liquor and sacrifices of animals (dogs, pigs, etc.) and fowls.

Dr J H Hutton, in an article on the "*Cultural Affinities of the Oraons with the Hill Tribes of Assam*" contributed to *Man in India* (January-March 1929) has drawn attention to various cultural traits which the Naga tribes of Assam have in common with the Oraons of Chota Nāgpur. Besides certain folk tales and *ganas* or taboos,—certain hunting customs and methods of exorcism, certain customs relating to death and burial and their connection with agriculture and the phallic and stone cult, are so remarkably similar in Assam and in Chota Nagpur that the question naturally arises as to how these similarities arose.

As to this phallic and stone culture, Dr Hutton writes, "The phallic and stone culture which is shared by so many tribes of Chota-Nagpur and Assam obviously existed at a very early date in Southern Asia, and was perhaps the earliest systematised religion that existed there. Certainly its traces appear in the practice of all subsequent faiths, not excluding Buddhism and Islam. What we wish to know first is whether the Dravidian or the Mundari tongue is the earliest language to be used in the peninsula. Both have left somewhat similar sporadic traces in Northern India and must have been far more widely spread to some prehistoric date. At the present day both are often associated with certain identical culture elements. Which of the two is responsible for the phallic stone culture of India and South-east Asia and whence was it brought? The question may never be answered, but meanwhile we are the richer for the admirable study of Oraon religion (in the recently published book on '*Oraon Religion and Customs*'), which at least gives us a starting point for such enquiries and which is probably of much more practical importance than the answer."

Although the origin of the phallic and stone culture in India is shrouded in an obscurity which may perhaps never be wholly cleared up, various considerations incline me to think that the phallic and stone culture of the Naga Hills and other parts of Assam and those of Chota Nagpur and South-eastern Asia in general point to some common source or connection in the remote past. In both Assam and Chota Nagpur there are traditions which preserve the memory of the ancient domination in

those tracts of a powerful prehistoric people called the "Asuras". Local tradition connects certain ancient sites on the Chota-Nagpur plateau with the name of some Asur Kings (such as Bān of epic fame) whom Assamese tradition too connects with these Asuras. Certain ancient architectural and other remains attributed to the Asuras in Assam as well as in Chota-Nagpur bear striking resemblances. I have seen some remains of ancient buildings of huge bricks near Gauhati (the ancient Pragjyotishpur) in Assam which are remarkably similar to those explored by me in the 'Asur sites' of the Ranchi and the Singhbhum districts in Chota-Nagpur (*Vide J. B. O. R. S.*, Vol I, pp. 229-253, and Vol. VI, pp. 393-423.) The remains near Gauhati are locally attributed to the Asur king Narak and his descendants. And Sir Edward Gait in his standard work on the *History of Assam* (Second edition, 1926, pp. 14-15) says, "It is impossible to say to what race this dynasty belonged, but the use of the appellation Asur shows that they are non-Aryans We may conclude from the numerous references to them in ancient literature, as well as from the remarkable way in which their memory has been preserved by the people of Assam down to the present day, that Narak and Bhagdatta were real and exceptionally powerful kings, and probably included in their dominions the greater part of modern Assam and Bengal east of the Karatoya".

Traces of certain Mongolian features noted by Colonel Dalton and others among the Hōs of Chota-Nagpur may appear to lend support to the inference of a past connection of certain Chota-Nagpur tribes with Assam. In this connection I may note that I have observed numerous instances of melanoglossia or the appearance of blue 'Mongoloid patches' on the skin of Munda and Oraon children, particularly babies.

Prehistoric shouldered celts such as are found in Burma and the Malay Peninsula and occasionally in a less pronounced form in the Naga Hills, which appear to have been the prototypes of the shoulder-headed iron hoe (*mo-khiew*) of the Khasis might supply another link in the chain of evidence. The Mūṇḍā languages of Chōtā-Nāgpur and Central India and the Mon-Khmer languages including Khasi of Assam and the Wa and Palaung languages of Burma exhibit certain similarities from

which Dr Grierson has concluded that they "contain a common substratum which cannot be anything else than the language of an old race which was once settled in those countries" (*Linguistic Survey of India*, Vol. IV, p. 5)

In an article on "*A Possible Ethnic Basis for the Sanskrit Element in the Munda Languages*" contributed to the *Journal of the Bihar and Orissa Research Society* Vol. IX, 1923, I adduced reasons to infer that these Auras of the prehistoric remains of Chōtā Nāgpur were probably a proto-Caucasian race who had moved on into India at a more primitive stage of Caucasian culture than that represented by the Vedic Aryans, and later gradually absorbed an indigenous melanoderm race (the Indian section of which was in ancient Sanskrit literature styled as the *Nisādas*) and thus became somewhat transformed in physical features by long continued miscegenation, and worked out the Asur civilization referred to in the *Rig Veda*, the *Sātapatha Brāhmaṇa*, and other early Sanskrit works. In a later article (*The Asurs—Ancient and Modern*) in the same *Journal* for the year 1926, I referred to certain distant resemblances between the Asur finds in Chōtā-Nāgpur and those of the famous ruins of Mahanjo-Daro and Harappa in the Indus Valley. Dolmens and urn burials and certain other prehistoric remains in Southern India might appear to bear a family resemblance to similar finds in Chōtā Nāgpur and Assam, and to suggest the inference that different branches of one and the same great 'prehistoric' race carried their culture to different parts of 'Nisāda' (or pre-Dravidian) India, and large sections of them were finally more or less absorbed in the negritio aboriginal *Nisāda* population and that the more virile portion of them contributed their blood and their culture to the make-up of the composite race and culture of the 'Aryan Hindus'.

A preliminary account of my study of the Hōs of Singhbhum was published in the last issue of the *Journal of the Bihar and Orissa Research Society*. Collection of materials for monographs on the Khārias and the Asurs of Chōtā Nāgpur and the Pāhārias of the Santal Parganas is in progress.

SARAT CHANDRA BOY

II.—On the Rule of Puṣyamitra Sunga.

By K. P. Jayaswal.

As already pointed out, on the Bharhut gateways we have a collective 'rule of the Śungas' (in the plural). The Purāṇic datum referred to by me before may once more be examined.

Purāṇas	} Puṣyamitraśta	senāniruddhṛṣya	sa
Matsya, Vāyu,		Brhadraṭham	
Brahmānda, unanimously :		kārayiṣyati	vai rājyam
			ṣaṭtrīṁśati samā nṛpaḥ.
Matsya and Vāyu ...	Puṣyamitra-	sutāśchāṣṭau	bhaviṣ-
			yanti samā nṛpāḥ.

In the last sentence taking *samā* as an avyaya, it will mean "eight sons of Puṣyamitra (i.e. Puṣyamitra) will be rulers simultaneously (*samā*)". The last sentence is to be taken with the preceding one : 'Puṣyamitra will make others rule (or rule through others) for 36 years'. These others were his eight sons. This is evidently borne out by the fact that the eight sons have not been given any separate period, nor is it stated that they were to come 'after' (*tatah*, i.e., 'after Puṣyamitra') as is usual when succession is predicated. The total reign-period given in the Purāṇas to the whole dynasty is 112 or 110 according to the two groups of the Purāṇas, and this is verified by the actual aggregate of individual reigns which work out to be 112 or 110 according to the differing data. Pargiter has fallen into an error in giving the aggregate as 118. he says, "the duration of the dynasty is stated by Va. and Bd, and by V. generally to be 112 years ; by 7 Mss. of Bh and one of Vs. 110. The aggregate of the reigns is 113" (DKA p 30). This error has arisen by reading 8 years for Agnimitra. It should be noted that the Matsya does not include Agnimitra in the list at all, and after the 36 years of Puṣyamitra's rule through others the Matsya brings the generation which comes after Agnimitra according to the Viṣṇu and the Bhāgavata. The group of

these later works alone names Agnimitra as against the Matsya and the Vāyu which do not count him in the list. The excess of eight years is not warranted by the details and the text of the older Purāṇas the Vāyu and the Matsya. It is thus evident that the 36 years given to Puṣyamitra cover the rule of his sons during his reign.¹

We have thus a curious constitution: eight sons of Puṣyamitra ruling together and their rule designated as 'the reign or (government) of the Śaṅgas', while Puṣyamitra is over them and is styled officially as 'Senāpati Puṣyamitra' (e.g. in the Ayodhyā inscription and Kālidasa's *Mālavikāgnimitra*). Is it this constitution to be read in the two words of the Purāṇas: "*kāraṇīyats vai-rāḍyam*", taking *vai-rāḍyam* as one word? Did the usurper pretend to establish a *kingless*, constitutional government? Or do the Purāṇas use the term to show that Puṣyamitra or any of his sons did not formally assume the royal title? In that case we shall have to assume that the *Āśvamedhas* of Puṣyamitra were performed by him as Senāpati, the Commander-in Chief of the Empire

The mistake of Pargiter is due to Brahmanḍa which is the latest in age. The Br. finding the independent datum of the Vāyu and Bhāgavata strives to read it with the Vāyu (which it generally follows) and corrected and modified the text of the Vāyu by substituting *Agnimitra-urpak* for *Puṣyamitra-urpak* before *oḍḍas*. This process was the result of a confusion. That it is not admissible is proved by the dynastic total which will exceed by eight years owing to this modification.

III.—A New Silpa Work.

By Phanindra Nath Bose, M.A., Nalanda College.

In the Tibetan Encyclopædia *Tanjur*, we have a Silpa work, the Sanskrit original of which, is believed to have been lost. The title of this Silpa work is given in the Tibetan translation as follows :—

<u>rgya. gar. skad du</u>	<u>sa. sta. la.</u>	<u>nya. gro. dha.</u>
भारतीय भाषायां	दशतल-	न्यग्रोध-
<u>parimandala.</u>	<u>budu. prati.-ma.</u>	<u>la. ga. ka. na. ma.</u>
परिमण्डल-	बुद्धप्रतिमा-	लक्षणनाम ।

Fortunately for us the Sanskrit original of this Silpa work has been discovered in the Nepal Durbar Library. Through the efforts of Dr. Rabindra Nath Tagore, the Viśvabhāratī Library has now got a copy of the above Ms. from the Nepal Durbar Library. In the present article, we are using the copy of the Ms. of the Viśvabhāratī Library, as well as the Tibetan xylograph of the same Library.

The Sanskrit Ms. begins thus :—

“ नमो बुद्धाय ॥

बुद्धो भगवान् जेतवने विहरतिस्म ।

तुषितवरभवनात् मातुर्जानाऽशनावगत कालसमय

शारिपुत्रो भगवन्तमेतद्वोचत् ।

भगवन् भगवता गते परिनिवृत्ते वा श्राद्धैः

कुलपुत्रः कथं प्रतिपत्यव्यम् ।

भगवानाह ॥ शारिपुत्र मयि गते परिनिवृत्ते

वा न्यग्रोधपरिमण्डलकायं कर्त्तव्यम् ।

The Tibetan translation begins thus:—

boom. ldan hdas hdod. chags dah bral. ba. la.

भगवते वीतरागाय

phyag htshal. lo.

नमः

After this the Tibetan translation has one line, which is omitted in the Sanskrit Text. It runs thus —

hdi. skad. bdag gis thos. pa dus goig na

एष मया श्रुतं एकदा ।

After this the Tibetan translation tallies almost with the Sanskrit Text. But one gets puzzled as to the real name of this work. The Tibetan translator has pointed out at the very outset that in the Indian language it is known as दशवसन्य शोधपरिमच्छब्दप्रतिमाखणनाम । But in the Sanskrit original, we do not find this name. At the end of the Sanskrit Ms. it is written :

“ इति सम्यक्संयुक्तमापितं प्रतिमाखणं समाप्तम् । ”

It is interesting to note that in *A Catalogue of Palm Leaf and Selected Paper Mss. belonging to the Darbar Library Nepal* By Mahamahopādhyāya Hara Prasad Śāstrī, we get the description of a similar manuscript. But it is called देवप्रतिमाखणम् । It begins thus —

“ नमो बुधाय ।

बुधो भगवान् जेतवने विचरति स्म ।

तुषितवरमघनात् सान्त्तर्धानदेशमसवमत काससमये शारिपुत्रो
भगवन्तमेतदधोचत् ।

ममघन् भगवता गते परिनिवृत्ते वा यावै कुक्षपुत्रै कथं
प्रतिपत्स्यम् ।

भगवान् शारिपुत्र मयि गते परिनिवृत्ते वा श्योषपरिमच्छब्द
कार्यं कर्त्तव्यम् । ”

(Volume II, page 41) .

In page 137 of the same *Catalogue*, we find another similar Ms. with the name of देवप्रतिमाखणम् । It is dated N S 768-A. D 1643

Again, in Bendal's *Catalogue of Buddhist Sanskrit Mss.* (page 200) we have the description of बुद्धप्रतिमालक्षणम् as follows :—

“बुद्धप्रतिमालक्षणम् । A short treatise in two parts on images of Buddha, probably more or less in imitation of Varāhamihira's work.

The work is in regular sūtra-form, beginning

नमः सर्वज्ञाय ॥ एवं मया श्रुतं

Sāriputra enquires thus of Bhagavān

भगवन् भगवता विना आद्वैः कुलपुत्रैः कथं प्रतिपत्तव्यम् ।

To which the reply is : भयि गते परिनिवृत्ते वा । न्यग्रोध-परिमण्डलं यावत् कार्यं तावत् व्योमं यावत् व्योमं तावत् कार्यं । पूजासत्कारार्थं प्रतिमा कारयितव्या । The rest discusses the dimensions, pose, etc., of the various members of the images, ending thus :

एतानि च ससंस्तानि लक्षणानि विचक्षणः ।

अत्यन्तशान्तकायार्थं यथाशीर्षं प्रकल्पयेत् ॥

.....सम्यक्संबुद्धभाषितं बुद्धप्रतिमालक्षणं समाप्तम् ॥ ”

Thus it appears that the Mss described above treat the same subject matter. But curiously enough, they bear different names. Thus we get the name of—

- (1) दशतलन्यग्रोधपरिमण्डलबुद्धप्रतिमालक्षणम्—in the Tibetan Translation.
- (2) सम्यक्संबुद्धभाषितं प्रतिमालक्षणम्—in the Viśvabhāratī Library Ms.
- (3) देवप्रतिमालक्षणम्—in Sāstrī's Catalogue.
- (4) बुद्धप्रतिमालक्षणम्
- (5) सम्यक्संबुद्धभाषितं बुद्धप्रतिमालक्षणम्

} in Bendal's Catalogue.

It is not clear what the original name of the book was. From the above, we find that both at the end of the Viśvabhāratī Library Ms. and of the Ms. described in Bendal's *Catalogue*.

we get the name—सम्यक्बुद्धमायित (बुद्ध) प्रतिमासूचणम् । Only in the Vivabharati Library Ms the word बुद्ध is omitted. We may therefore take the above title to be the original one.

This Silpa work deals with the measurements of the Buddhist images. Sāriputra introduces the subject matter. As has been remarked by Bendal, the work is in regular sutra form. In reply to the question of Sāriputra, Bhagavān says :

सारिपुत्र मयिगते परिनिवृत्ते वा व्यघ्रोपपरिमण्डलकायं कर्तव्यम् । याचत्कायं तावद्व्यामम् ॥ यावद्व्यामं तावत्कायम् ॥ पूजासत्कारार्थमप्रतिमा कर्तव्या । सर्वाङ्गोपाङ्गावयवस्यौघसावयव-
लाळित्यसहस्रितत्वं कक्षाकारशिरः स्कन्धांसंसितोष्णोपत्वाविपु-
सस्त्राणात् तत्रायामविस्तारोद्धेदसन्धिवन्धनिर्गमैः प्रमाणं वोधिसत्त्वानां
सुगतानां च प्रवक्ष्यामि तच्छृणु ॥

तत्र तावत् प्रमाणं वोधिसत्त्वानां स्वेनाङ्गुलीप्रमाणेन शतं विंशत्युत्तरं । बुद्धाया पञ्चविंशत्युत्तरम् ।

After this begins the enumeration of measurements of several parts of the image in the form of ślokas. Bhagavān continues to say :—

चतुरङ्गुलमुष्णीषं कैशस्त्रानं ततोदयम्
सार्धं व्योदशीमात्रा मुखभागस्य तत्तयम् ॥ १ ॥
सप्ताटं नासिकास्थाय त्रिचुक्रान्तं तृतीयकम् ।
चतुरङ्गुलं सप्ताटान्तं तुल्यं नासिकाया भवेत् ॥ २ ॥
साधिका त्रिचुक्रान्तं त्रिचुक्रं, ह्यङ्गुलं भवेत् ।
पायामं निर्गमाद्यैव चतुरङ्गुलमिष्यते ॥ ३ ॥
चतुरङ्गुली कपली तु कर्णमूलाद्विनिश्चितौ ।
हनुःस्यात् व्यङ्गुलीत्सेधो विस्तारो ह्यङ्गुलस्य स' ॥ ४ ॥
साधिका परिपूर्णं स्यात् महाविहङ्गुर्यथा ।
अधरो ह्यङ्गुलायामो निर्गमोद्धेदमात्रिका ॥ ५ ॥
मध्ये स्याच्छोभना रेखा नृ सिनी माद्यके स्मृतौ ।
चतुरङ्गुलमायामं वक्ष्ये कुर्याद्विचक्षणः ॥ ६ ॥

It is not possible to guess the age of this Silpa work. In Bendal's *Catalogue*, the Ms. of बुद्धप्रतिमालक्षणम् is dated the 13th century. In Mm. Haraprasād Sāstrī's *Catalogue*, the Ms. देवप्रतिमालक्षणम् is dated N. S. 763-A. D. 1643. We have seen that both these Mss. tally with the present one. We can, therefore, put one limit of the age of this Silpa work—the 13th century A. D. That is to say, it cannot have been written after the 13th century of the Christian Era. Again, we know that this Silpa work was translated into the Tibetan language. We also know that most of the Tibetan translations were done after the introduction of the Buddhist religion in Tibet in the sixth century A. D. We can therefore place the date of this work somewhere in the sixth century, if not earlier.

In the present work, we find Sāriputra introducing the subject matter. Sāriputra is a familiar name in the Buddhist literature. There is another Silpa work ascribed to Sāriputra. It is found in Ceylon and used by the artists of Kandy in making Buddhist images. Dr. A. K. Coomarswamy referred to this work under the name of Sāriputra in his *Medieval Sinhalese Art*. This Sinhalese Silpa work is written in corrupt Sanskrit. Perhaps it found its way to Ceylon from India. It is at present published from Colombo in Sinhalese character and known as सारिपुत्रश्रमणो विस्वप्रमाणम् । The book begins thus :—

“ नमस्तस्मै भगवते अर्हते सम्यक्सम्बुद्धाय ।

अथेदानीमप्रवक्ष्यामि विस्वमानविधिंशृणु ॥ ”

It ends thus :—“ इति गीतमवंशे सारिपुत्रश्रमणो विस्वप्रमाणम् प्रथमो खण्डं समाप्तम् । ”

IV —Deities of Jalkar (A Rejoinder).

By Kallipada Mitra.

Mr Sarat Chandra Mitra in an article entitled *Notes on Some South Behar Godlings of Fishery and Hunting* published in this Journal (Vol XIV, part IV, pages 556—580) has kindly given me an opportunity of reverting to the subject of *Jalkar Deities* about which I published a paper in 1925 (Vol XI, pages 181-186). Amar Singh, Sultan Khan and Dina Bhadri are regarded by me as deified heroes.

Mr Mitra says (Vol. XIV, page 557) "with respect to this statement I beg to state that it has been made without making sufficient enquiries, and they cannot be deified heroes, as I shall show presently."

He says: "If we examine the histories of ancient races we find that whenever any historical personage has been renowned for his proficiency in some occupation or profession he has been canonised as a hero or god and is sometimes worshipped." In support of his statement he quotes the instance of Nimrod, but he ends by saying that "*he is not actually worshipped*"!

Then he refers to the "culture heroes" who "are worshipped by those races of people even at the present day" and quotes the example of Sivaji and Rājā Mahipala who were men of great renown, and of Yashvantarao, "a subordinate revenue officer of Khandesh and the Swami of Akalkot reported to have been a mutiny refugee, men of lesser renown." The godling Sivaji has an image and is worshipped by the Ganda caste of fishermen. Portraits of Yashvantarao are worshipped. The Swami has a temple and monastery of his own. It has not been mentioned if Rājā Mahipala is fortunate in having an image or a temple.

Now it appears that such heroes were all *men* and were at one time actually in the flesh and their claims to being *canonised, deified* or *apotheosised* rest upon some characteristic virtue—some renown, e.g. heroism, good government, generosity or

some power of varying degrees. And Mr. Mitra says. "In India the canonization of dead men into gods is still going on among the lower tribes."

Whatever Mr. Mitra has said goes to strengthen the explanation offered by my *Mālāhī* guide that Amar Singh, Sultan Khan and Dīnā Bhadrī were deified heroes—though not so great as "mighty fishers and hunters before the Lord" and shows it to have admirably satisfied the conditions of deification. He therefore finds the answer to his objection in the said explanation on page 185 of Vol. XI, Part II which I must quote :

"The *Mālāhā* explained to me that Amar Singh, Sultan Khan and Dīnā Bhadrī had been *men* belonging to the class of votaries who worship them and that they have been apotheosized, and to give me a handy illustration he said that the local zemindar (who accompanied me) who was so kind and charitable to *ryots* would after his death become a deity and would demand *puja* of them, and woe to him who would give umbrage to him. Bad men after death become mischievous spirits, and people ought to have a care."

The above explanation contains the elements that are needed for deification :

- (1) (a) They were *men* ;
 (b) belonging to the class of votaries who worship them ;
- (2) the living zemindar (in the flesh) would *for his kindness and charitable disposition* become a deity after his death. He therefore satisfies at least one condition, viz. the possession of "the sterling virtue of heart" and probably of the head

It would not do, therefore, to argue away *their being men* and to say that Amar Singh, who was an actual Rājput, Sultan Khan, an actual Mohammadan, and Dīnā Bhadrī, an actual Musahar who were at one *time in the flesh* and heroes in their own way in their neighbourhood—were not "*men* but only invisible and incorporeal spirits" "presiding

over fishing and fowling," as Mr Mitra does on page 560 of Volume XIV

The Mālāhā says that Amar Singh, Sultan Khan and Dīnā Bhadrī were *men belonging to the class of votaries who worship them*. I have got a remarkable corroboration of his statement. In September, 1925, I got information, supplied by a fisherman of Muluktānd near Kharagpur in the District of Monghyr, that *Naṭuā Dyāl Singh* is worshiped by men of the Goḍhī caste as a *Jalkar* deity. The *Goḍhīs* take their bath, and offer betel leaves (*pān*), betelnuts (*supari*) *ganja* and wine (*tapān*). They sacrifice a castrated goat (*kāśā*) of white colour. *Naṭuā Dyāl* was a Goḍhī by caste, and his own castemen (Goḍhīs) officiate at the ceremony. Occasionally a Brahman also officiates. No image is made.

Naṭuā Dyāl was a very important person of the Goḍhī caste and though himself a magician was killed by the magic of his own mother-in-law, *Borhā Goḍhī* or *Bahurā Gohḍī* at *Bakhri* near a *Pākūr tree* which people still point out as the scene of the tragedy and which they call *Thīoṭi Pākūr*. His whole life and exploits are celebrated in rural songs and are widely sung in these parts. I have now with me two texts of the songs lying for about a year which for want of time I could not edit but which I hope to publish soon. One comes from *Bakhri*. From this I am giving the following account of him—He belonged to the caste of Goḍhī and lived in a Tirhut village. *Raja Thān Singh* of *Bakhri shāhar* (whose family endures even to-day) made him his *Tahsildar* and gave him the title of *Singh*. His father's name is *Māl Vumar* his uncle's *Bhūmal Sahnī*, etc. The well celebrated in the legend is still there and called *Chāmbā fīd nār gā rājā kī nār*. The event happened about two hundred or two hundred fifty years ago (*is kīnā hī ghāṭana ghāṭne do aḍhāi son varāḥ kīnā kīnā*). He was also called *Garbī Dyāl Singh* or simply *Dyāl Singh*. One of the songs begins

Bārāh varāḥ Baṅglā gun sikkhō

Twelve years he spent in learning magic in Bengal.

In the explanation of the origin of sainted deities the Mālābhā also says : " Bad men after death become mischievous spirits " And he is wonderfully accurate in his statement. " Another remarkable development of hero-worship," observes Crooke,¹ " is the deification by criminal or nomadic tribes of notorious robbers. Doms in Bihar worship Gandah, said to have been hanged for theft many years ago and Syām Singh, another worthy of the same class ; Dusādhs worship famous criminals of their caste under the names of Goraiya, Sālhes or Kārikh " He quotes further examples of Madhukar Sāh, a noted outlaw, Māna, a deified thief and Bhukiyā, a notorious freebooter

Worship is offered to Jethu Bābā in my neighbourhood on the day of Govardhana festival. He is regarded as a cattle-deity. My informant says that he was a mehtar and was a notorious murderer

If my guide has been so accurate in his statement I see no reason why I should not accept his explanation that Amar Singh, Sultan Khan and Dinā Bhadrī were deified heroes, and the complaint of Mr. Mitra that I have made statement "without making sufficient enquiries " and have " not collected any evidence " to substantiate the statement does not in any way minimise the accuracy of the explanation of my guide. At the time that I wrote the article my guide's information which I obtained in two days' tramp along the *phils* and *jalkars* while out in shooting wild fowls was its sole basis. For so far as I remember I returned to Monghyr on the 12th January, 1925 and wrote and sent the article to the editor on the 14th or the 15th. It was therefore not possible to collect more evidence that could satisfy Mr. Mitra, nor is it possible just now to collect more evidence unless I go tramping again (of which there is no immediate likelihood) after wild goose which may turn out to be significant both literally and metaphorically. For in all probability my next informant may

¹ *Religion and Folklore of Northern India*, (1926), pp 179 and 180.

be another *Mālāḥ*. I shall remember, however, the advice of Mr Mitra regarding the enquiries he desires me to make and communicate the results in the pages of this journal. Till then probably he will not accept the statement that Amar Singh, Sultan Khan and Dinā Bhadrī were men, but after death became deified heroes, but obviously I cannot force him to do so.

My subsequent enquires only confirmed the explanation of my guide. In December, 1926 I went shooting wild fowls a few miles off Begusarai with Mr Philips of Bonduar Kothi at the *Āpānīchar*. There an ancient *Mālāḥ* loaded with venerable years informed me of the following Jalkar deities :

- 1 *Amar Singh* —My previous acquaintance.
- 2 *Jey Singh* —Possessing the same characteristics as Amar Singh
- 3 *Kāmā Mā.* —Is worshipped with *achōkat* (sunned rice) *ṣāḥi*, vermilion, *ṛālī* (bracelets), and lac-dye (all these form the lucky trousseau of the *solāḡin* or a woman having husband) Probably she is Kamlājī with a variant name
- 4 *Farid Khān*. —He is worshipped by the Mahommedan *ṣāḥādars* before casting the net at the head of the *jalkar*. Cooks are sacrificed, and the deity has no predilection for a particular colour—any colour may do. *Gānjā* and *Bhāng* are offered, but no wine (probably as the use of wine is forbidden to Mahommedans)

No images of these deities are made. Amar Singh, Jey Singh and Farid Khan were men—notables in their own way—and became deities after their death.

In December, 1927 I shot at Barail *oḥar* (about 16 square miles in area) in the district of Muzaffarpur about 26 miles from Hajipur. There I got the following information about *jalkar* deities from the *sālāḥīs* which was confirmed by the local gentlemen of Hajipur in whose company I went—the information was given in their presence,

1. *Amar Singh*
2. *Bharosi Singh* of Siwraril
3. *Kamlā Devī*.
4. *Garab Devī*.
5. *Bābu Keol*.

The usual sacrifice of ram, Khassi (castrated goat), *pāthā*, (goat), pig etc., was offered.

The account given of Amar Singh was this He was a Rajput. He fell in love with and married the daughter of a *Mālāha*, and become one of the *Mālāhās*. He rose to be the Rājā of Khulladts (in whose veins the commingled blood of Rajput and Teor castes flows?). After his death he was worshipped as a deity, offerings to him consist of *gānjā*, *laddu*, milk, *geruā*, *sav sātanjā ānāj ke bhūnjā*.

Bābu Keol is a godling of *Mālāhās* and is regarded as the brother of river Kamlā. In the Kharagpur area in the district of Monghyr there is a deity of the name of Kamlā Koylā who is worshipped, strangely enough, as a male godling like Bābu Keol, before fishing. After bath the officiant burns incense and offers *pān*, *supāri*, *sweets*, but no wine. *Pāthā* (goat) of all colours is sacrificed. Probably this is owing to confusion of sexes, or probably where the idea is that Kamlā is a female deity she ought to have a brother and there is Bābu Keol. The worship of mother goddess, for example, as a bi-sexual deity is not unknown. It has been shown by Barton that the goddesses of the Arabians of Yemen were changed into gods so that, for example, the Semitic invaders of Babylon arrived there with Shamas, the male form of Shams. In this paper, obviously, I cannot discourse about this interesting problem, but scholars know well that a deity may be worshipped as a male, as a female and as a hermaphrodite combining the two sexes.

It is clear, therefore, that some of the *jalkar deities* were at one time *men*, *were actually in the flesh*, who were famous in their own ways during life and became apotheosized as deities after death. This is true of other deities too about whom I

have gathered information. Let me refer, for example, to the following cattle deities :—

1 *Garbhā Bābā*

2 *Kāru Bābā*

3 *Baktor Bābā*

I have seen worship of *Kāru Bābā* offered at my own *bātkān*. One night at about 11 o'clock as I was returning to my quarters I heard from a distance lusty chants rending the stillness and calm of the night which grew in intensity as I approached my house. As a cow of mine did not give sufficient milk the aid of *Kāru Bābā* was sought and following the advice of my milkman my wife, without my knowledge, arranged to have *Kāru Bābā* worshipped. Some incense was burnt and *gānjā* offered by the celebrants—four *goālās*—who were now singing *Kāru Bābā kō gīt*. No image was made of him. A veteran *goālā* informs me that in worshipping *Garbhā Bābā* and *Baktor Bābā* no image is made of them. None of these godlings have temple or shrine here. All these deities were at one time men and after death became deified heroes and are still regarded as such, and none here at least dispute their status as deified heroes though of course no 'images or fetishes of these godlings are made and installed in some shrine.'

My informant says that *Garbhā Bābā* was in life a *kumār* or a potter. Probably he is *Garbhā Kumar* of Martin's *Eastern India* (Vol. I, p 132) containing an account of deities of the Hindus of Bhagalpur district. "Garbhā Kumar. This devil according to some was a potter, according to others, a milkman; but it is generally believed, that like the two Brahmins, he was killed by a tiger, and his ghost has ever since been a terror to the neighbourhood, and it is deemed prudent to worship him."

We get the following account from Martin's *Eastern India* Vol III, p 169, regarding the religion of the people of *Puraniya* (Purnea)

"Karnadev with his brothers *Baladeh*, *Duladeh* and *Tribhuvan* are much worshipped, especially by the *Dhanuks*,

Kaibartas and many impure tribes. *There are no images, priests nor temples, but offerings are made*¹ at certain places, especially where these persons are supposed to have resided on earth. Some offer sacrifices, but this is not usual. I have already mentioned all, that I could learn concerning the history of these persons."

So, though Karnadev and his brothers had "no images, priests nor temples" hitherto no scholar has been known to dispute the above statement thus "we cannot accept his statement that they were deified heroes."

Do the names of Amar Singh, Sultan Khan and Dinā Bhadrī sound very different from Ajan Singh, Sanggu Mandal, Sabal Pahlwan, Jaguhajra, Sales, Dukhachariya, Latehar, Yasoya, Budh Kumar and other deified heroes about whom we read in Martin's *Eastern India*? What special objection is there to their being regarded as deified heroes?

Mr. Mitra advises me to get "legends about these godlings and goddesslings which prove them to have been mighty fishers and hunters before the Lord."² At the outset I must confess my inability to do such a hazardous task as to try to prove the river deities Gango (Ganges) and amlājī and the female deity of Chandmarī *char* to have been "mighty Fishers", far less "Mighty Hunters before the Lord", for the obvious reason that they were not human beings nor has any one

¹ Italics are mine

² Is Mr. Mitra's quotation about "Mighty Fishers" all right? In Genesis Ch X, V. 9, we read, "He was a mighty hunter before the Lord wherefore it is said, Even as Nimrod [the mighty hunter before the Lord]." Evidently "Mighty Fishers" is Mr. Mitra's emendation of the text. Then again are we justified in using "mighty hunter" or mighty fisher *before the Lord* with reference to Amar Singh, Dinā Bhadrī and Sultan Khan and others in the same way as "mighty hunter" is used of Nimrod? "Before the Lord" may mean "whom God favours" But the Hebrew preposition for *before* indicates a hostile sense, "and the Septuagint gives it such a sense in the verse under consideration—a Greek phrase meaning—"against the Lord" The Targums and Josephus give the preposition this hostile meaning. The context also inclines us to it... .. Josephus, in accordance with Jewish opinion, represents him as the impious builder of the Tower of Babel, and as ever acting in direct opposition to the divine government and will."

suggested to me that they were ever in the flesh and lived and died as mortals. The question then remains whether I can prove that Amar Singh, Sultan Khan and Dinu Bhadri "were renowned for their skill in fishing and hunting" and were "mighty Fishers and Hunters before the Lord"—which appears to be *the sine qua non* demanded by Mr Mitra to their claim of being regarded as deified heroes, as implied by his "and have therefore¹ been deified". But is it at all *necessary*? I do not think so. It appears that their powers, now they were out of the flesh, were not simply limited to the granting of a heavy load of fish and fowls, but far more transcendent in character. But if Mr Mitra insists on their being "mighty Fishers and Hunters before the Lord", probably they might be thought to have satisfied that condition. The Mukaffarpur legend about Amar Singh shows that although he was a Rajput by birth, yet by marrying the daughter of a Mālāhā he was content to be regarded as a Mālāhā, and although he became Rājā of Khulladits probably he became so with the help of the mālāhās as they found him to be "a Mighty Fisher before the Lord". Naṭuā Dayāl was a Goḍhī by caste one of whose pursuits is fishing, and as a fisherman probably he was a "Mighty Fisher" before he became the Tahsildar of the Rājā of Bakhri Sākar. It appears that Sultan Khan was not a fisherman by caste, but there is no conceivable bar to his being "skilled in fishing" and being a "Mighty Fisher", though as I have said it is not *necessary* for him to be so, for he was a "mighty godling" according to my guide and "would otherwise gratify the wishes of his votaries" not simply the wish of getting fish or fowl. Dinu Bhadri stands on an adamant rock and is not going easily to be dislodged from his secure position of a deified hero. Soon after the publication of my *Deities of Jalkar* Sir George Grierson wrote to me (August 12, 1925):—

"Dear Sir,

I was interested in your "Deities of Jalkar" on p. 181ff of the J. B. O. R. S., Vol. XI, part II

¹ Italics are mine.

Regarding Dīnā Bhadrī may I tell you that you will find the whole story of these heroes given in full, in the original Maithili, with an English translation, in an article of mine entitled "Selected specimens of the Bihari language", on pp. 617ff of Volume XXXIX (1885) of the "Zeitschrift der Deutschen Morgenländischen Gesellschaft"

I am sorry that I have not got any spare copies of the reprint of this article, or I should send one to you, but if you wish to read the story, you can probably borrow the volume from the library of the Bengal Asiatic Society.

Yours faithfully,

GEORGE A GRIERSON."

I read the article in question with considerable interest not only for the sake of the story of the deified hero whose position was fortunately established by so distinguished a scholar forty-three years back but also for the grammar and philology of the language of which I have been an humble student and teacher. If Mr Mitra cares he may read the same and satisfy himself.

When a man dies he becomes in the words of Plato's *Phaedo* "a disembodied spirit." I am quoting myself (p. 186, Vol. XI, p. 186). "It more or less amounts, in the case of the male deities, at least, to hero worship, the heroes being, invested with far greater power for good and evil with an acquisition, now they are in the spirit world, of far more magical powers than when they were in the flesh."

I will conclude with the remarks of Sir James Frazer. "If we could strictly interrogate the phantoms which the human mind has conjured up out of the depths of its bottomless ignorance and enshrined as deities in the dim light of temples, we should find that the majority of them have been nothing but the ghosts of dead men,"

and of Sir Alfred Lyall "In this stage of belief the people construct for themselves Jacob's ladder between earth and heaven, the men are seen ascending until they become gods, they then descend again as embodiments of the divinities; in so much that it may be doubted whether any god ... come down the ladder who had not originally gone up as a man and an authentic man."

V —Further Notes on the Dog Bride in Santali and Lepcha Folklore

By Professor Sarat Chandra Mitra, M A. B L.

In my paper entitled : "*The Dog Bride in Santali and Lepcha Folklore*" which has been published in the *Journal of the Bihar and Orissa Research Society* for September 1928, pages 422—425, I have shown that a most curious and interesting item of the folklore of the Santals of the Santal Parganas is that about the dog bride who is really a human girl wearing the skin of a dog, and that, curiously enough, the dog bride also occurs in the folklore of an altogether alien people, namely, the Lepchas who are Mongoloid tribe of hillmen living in Sikkim, Western Bhutan, Eastern Nepal and the Darjeeling district in the Eastern Himalayas. I have further shewn, in the same paper, that on comparing the Santali and the Lepcha folk tales about the dog bride we find :—

(1) That, in the Santali version, the dog bride is only a human girl wearing the skin of a dog, whereas, in the Lepcha variant, she is a fairy wearing a dog-skin guise.

(2) That, in the Santali version, she leaves off her dog-skin guise during the night and assumes the shape of a human girl ; whereas, in the Lepcha variant, she doffs her dog-skin guise during the day time and assuming the shape of a beautiful girl does the household work

(3) That in the Santali version, the dog-bride is only a human girl made of flesh and blood, whereas, in the Lepcha variant, she is a fairy made of gold from her head down to her waist and made of silver from her waist down to her feet

(4) That, in the Santali variant, the dog bride's husband burns the dog-skin guise which is reduced to ashes whereas in the Lepcha variant, the orphan boy tears off the fairy's dog-skin guise to pieces and scatters the same

everywhere, and gold and silver flowers spring up from these fragments of the skin.

Since the publication of the aforementioned paper, I have come to know that similar myths or legends about the dog-bride are also current among the Huichol Indians who dwelt in a mountainous tract of country near Santa Catarina in western Mexico, and also among the Cora Indians, a tribe of nominal Christians, who inhabit that part of the country which borders that of the Huichols on the west.

The Huichol Indians narrate a deluge-myth in the course of which it is stated that, once upon a time, a Huichol Indian was felling trees in a forest tract with the object of clearing it for agricultural purposes. But, every morning he found to his chagrin that the trees which had been felled by him the day before, had grown up again as tall as ever. He, therefore, decided to investigate into the matter and to try to find out the causes which brought about this strange event. For this purpose, he went to the clearing. As soon as he arrived there, there rose from the ground an old woman with a staff in her hand. She was no other than the "Great-Grandmother"—the goddess of the earth—who cares every green thing to grow up from the dark under-world. But the Indian did not know who she was. However, the old woman pointed with her staff towards the north, east, south and west and also upwards and downwards. On this being done, all the trees which had been felled revived and stood up again.

Now having come to know the causes which were undoing his work, he angrily enquired of the old woman: "Is it you who are undoing my work?" She replied: "Yes, it is I who am doing this, in order that I may have an opportunity of talking with you. I want to warn you from before about a great flood which will very soon deluge this world. It will happen after five days. A very bitterly cold blast of wind will blow; and it will make you cough. Therefore you must make, from the timber of the fig-tree, a box as large as your body. You must take with you five grains of

corn of different colours, five beans of varying hues, a fire and five square stones of wood to feed the fire with, and *must also take with you a black bitch* "

The man did as he was instructed by the old woman to do. On the fifth day, the box was ready. The Huichol Indian entered the box, taking with him the aforementioned things and the bitch. Thereafter the old woman fastened the lid on to the box made it water tight and air tight and took her seat on the box with a macaw perched upon her shoulders.

For five years, the box floated about on the surface of the waters of the deluge.

In the sixth year, the deluge began to subside, and the box settled on a mountain near Santa Catarina where it may still be seen.

The old woman turned into wind and vanished away. *But the Huichol Indian lived with the bitch in a cave close by and resumed the work of clearing the fields which had been interrupted by the deluge. He used to go out to his work in the morning and return home therefrom in the evening. But the bitch stayed in the cave all the time and, during his absence, used to doff her dog-skin guise and kneeling down in the shape of a woman, ground the corn into flour for the cakes which she used to bake for her mate before his coming back from the work. On his return home, the man was astonished to find the cakes ready cooked for him but could not make out who it was who did this. After five days had elapsed, he hid himself underneath a bush near the cave and, while the bitch had assumed the shape of a woman and was doing the work, caught hold of her and burnt her dog-skin guise in the fire. Then he bathed her head with a mixture of water and the ground corn flour, on which being done she felt refreshed and remained a woman for ever thereafter. Thereafter the man and the woman lived together and became the progenitors of a large number of children, both sons and daughters, who repopulated the world which had been depopulated by the devastating deluge.*

The Cora Indians, who live in the country bordering that of the Huichol Indians, also narrate a similar myth about a great deluge in which *the aforesaid incidents occur of the woodman who was warned of the coming flood by a woman and who, after the deluge had subsided, cohabited with a bitch metamorphosed into a human wife.*¹

It will not be out of place to state here that, in a deluge-myth which is current among another Indian tribe—the Canaris Indians of Ecuador, in the ancient kingdom of Quito, the part of the dog-bride is played by a macaw-bird. In the course of this myth it is stated that two brothers were saved from a great deluge which devastated the world. After the waters had subsided, they descended from a mountain and began to dwell at the foot thereof, and sought their food in the hills and valleys below. They built a small hut in which they lived and eked out a miserable existence. One day, returning home in the evening, they found that plenty of food and drink had been provided for their meals. This happened for ten days. So deciding to find out who it was that provided them with food, the elder brother hid himself and presently saw two macaws, dressed like Canaris Indians and having the faces of beautiful women, present within their hut and making the preparations to cook their food. On seeing him they became angry and flew away. After three days, the younger brother hid himself and saw the two macaws come and prepare the food. On this occasion, the two brothers caught hold of the younger macaw and took her to wife, by whom they had six sons and daughters from whom all the Canaris Indians are descended.²

On comparing the Huichol, the Cora and the Canaris Indian myths with the Santali and the Lepcha folktales, we find —

(1) That, as in the Santali and the Lepcha folktales, the bitch in the Huichol and the Cora Indian myths is really a human god wearing a dog-skin guise, and that, in the Canaris

¹*Vide The Folklore in the Old Testament* By Sir J. G. Frazer. Abridged Edition, New York The Macmillan Co., 1923 Pages 103-109.

²*Op cit.*, pages 104-105.

Indian myth, the macaw bride is really a Canaris Indian woman dressed in the plumage of a macaw

(2) That, as in the Santali and the Lepcha folktales, the bitch in the Huchol and the Cora myths doffs her dog-skin guise during the absence of her mate and does the cooking or other household work; and that, in the Canaris Indian myth, the macaw bride stealthily provides the two Indian brothers, with plenty of food and drink for their meals

(3) That, as in the Santali and the Lepcha folktales, the heroes in the three Indian myths are astonished to find that, during their absence, somebody had stealthily done their cooking or had performed some other household work for them or had provided plenty of food and drink for their meals

(4) That, as in the Santali and the Lepcha folktales, the heroes in the three Indian myths, being unable to make out who it was that did the cooking and the household work for them, or provided them with plenty of food and drink, hid themselves, and shortly, found that the bitch and the macaws did all this for them

(5) That, as in the Santali and the Lepcha folktales, the heroes in the three Indian myths, emerged from their respective hiding places and caught hold of the bitch and the macaw; that, in the Huchol and the Cora myths, the heroes burnt the dog-skin guise belonging to the bitch who remained a human girl for ever thereafter; and that, in the case of the Canaris Indian myth, the heroes caught hold of the macaw but did not burn her macaw plumage guise.

(6) That, as in the Santali and the Lepcha folktales, the heroes in the three Indian myths, took the bitch and the macaw to wife and lived happily with their bitch bride and macaw-bride (all of whom had then assumed the shapes of human females), and became the progenitors of many children by them

From the foregoing analysis, it would appear that the parallelism between the foregoing Huchol, Cora and Canaris Indian myths on the one hand, and the Santali and the Lepcha folktales on the other one, is complete.

Now the question arises : How is this similarity to be accounted for ? Have the Huichol, the Cora and the Canaris Indians borrowed the incidents of the foregoing myths, which form the subject-matter of this paper, from the Santals and the Lepchas of North-Eastern India, or *vice versa* ?

In my previous paper, I have shown that though the Santals and the Lepchas live in North-Eastern India, there was no inter-communication between them within periods of time of which we have any historic records, and that, therefore, the two races could not have borrowed the incidents of the folktales in question from each other. This being so, I have arrived at the conclusion that the similarity between the Santal and the Lepcha folktales was due to the " psychic unity " of these two races.

But the Huichol and the Cora Indians live in West Mexico, while the Canaris Indians live in Ecuador in South America. Both these countries are situated at a great distance from India and are separated from the latter country by wide expanses of ocean and broad stretches of foreign countries. In these cases there could not possibly have been any inter-communication whatever between the aforementioned three Indian tribes on the one hand and the Santals and the Lepchas on the other one. Notwithstanding this, there remains the similarity between their respective myths and folktales to be accounted for. We can explain this extraordinary resemblance by only stating that the aforementioned five races have evolved their respective myths and tales independently of each other and that they have done this on closely similar lines on account of their " psychic unity ".

The three foregoing Indian myths afford further illustrations of the widespread belief which is current among primitive peoples and which is to the effect that, to the mind of the uncultured folks, there is hardly any difference between human beings on the one hand, and beasts and birds and reptiles on the other one, and that the former can very readily change themselves into the latter, and *vice versa*.

The Canaris Indian myth illustrates the doctrine of Totemism. As all Canaris Indians believe that they are descended from the macaw they look upon this bird as the token of their tribe and venerate it as sacred. They use the plumage of this bird for dressing themselves with on ceremonial and festive occasions. They also consider as sacred the mountain on which the macaw lived as the wife of the two Canaris Indian brothers.

VI.—On the Indian Folktales of “The Substituted Letter” Type.

By Professor Sarat Chandra Mitra, M.A., B.L.

There are a few folktales current in India and one in Europe which do not appear to have been scientifically studied by European and American folklorists. The story-radical deducible from these tales may be stated as follows :—

(1) The hero's enemy, being desirous of killing the hero, sends the hero to the former's friend.

(2) The former entrusts the hero, who does not know how to read and write, with a letter (or potsherd) on which the instructions (to the former's friends) to kill the hero are written.

(3) The hero falls asleep on the way and, in this condition, is seen by the heroine who knows how to read and write. In the European story, he is seen by some robbers

(4) The heroine, noticing the letter, reads its contents and is horrified at the cruelty of the hero's enemy.

(5) The heroine or the robber-leader substitutes in place of the letter written by the hero's enemy, a fresh letter in which the hero's would-be murderer is instructed to at once marry the hero to the heroine

(6) The hero's would-be assassin acts according to the instructions embodied in the substituted letter.

(7) The hero rises to a high station in life and lives happily with the heroine.

Two of these stories are recorded in the ancient classics of India. The first of these is the tale about Rājā Chandrahamsa which is narrated in Kāśīrāma Dāsa's *Mahābhārata* (C. C. Bandyopādhyāya's Edition, pages 1097—1104) The tale runs as follows .—

Rājā Dadhīmukha, who was a devout worshipper of the god Vishnu, was childless. He, therefore, performed a sacrificial rite, as the result of which the child Chandrahamsa was born to him, But the infant was very luckless. During his childhood

his father was poisoned to death, his mother died very shortly afterwards ; even his foster nurse who used to rear him up, fell ill and died. Under these circumstances, he was removed to the house of his maternal grandfather who was also a RAJA. Even here also, misfortune dogged the foot steps of the child Chandrahamsa. His maternal grandfather was assassinated by his wicked minister, Dhṛṣṭabuddhi, who became jealous of his murdered master's infant grandson, as some astrologers predicted that the latter would become a Rājahakravartī. He, therefore, ordered his executioners to take Chandrahamsa to a jungle and kill him there. Feeling compassion for the boy, the latter spared his life and, after having killed a dog, brought its blood and showed it to their present royal master as a token of their having loyally performed their duty.

Having been abandoned in the jungle, the child Chandrahamsa began to cry. Here he was picked up by another minister named Kalunga who was also childless, and who, therefore, brought him to his house and began to bring him up. But the news of this soon reached the ears of Dhṛṣṭabuddhi who now became still more determined to get rid of the child.

As Chandrahamsa had, by this time, grown up to young manhood, Dhṛṣṭabuddhi obtained Kalunga's permission to send the boy with an important letter to his son Madana, as this errand could not be performed by an ordinary messenger. Chandrahamsa was made to swear not to read the contents of the letter which was then made over to him. Taking it, the boy started on his journey.

The message written in the letter ran thus :—

Bengali Text (in Devanagari Script) of the Message.

१। शुनह मदन तुमि आमार संवाव

२। चन्द, हुंसे पाठावतु तव विद्यमान॥

३। यावामातु विष दान करिवि यत्तने॥

English Translation.

1 O Madana ! Pay heed to what I am writing to you about

2 I am sending Chandrahamsa to you

3. As soon as he will arrive there, *give him poison (bisha) very cautiously*

After his arrival in Madana's pleasure-garden, Chandrahamsa, who had become greatly fatigued by reason of his having travelled over such a long distance, lay down there and became fast asleep.

At that time, Dhrshtabuddhi's beautiful daughter, Bishayā (विषया) by name, had come to the garden for the purpose of worshipping the deity Siva.

Seeing the young prince sleeping in the shade of the trees, she was fascinated by his extremely beautiful appearance. At the same time, her eyes suddenly fell upon the letter which was half-hidden in the folds of his headdress. Noticing it she became very curious to know what could be written in this letter, which had been concealed with so much care. Reading its contents, she was horrified to learn that her father could be so cruel-hearted as to order such a beautiful prince to be killed.

For the purpose of nullifying her father's inhuman order, she altered the tenor of the letter by adding the syllable *yā* (या) to the word *visha* (विष). The letter, in its altered state, ran as follows :—

Bengali Text (in Devanāgarī Script) of the altered message.

१। नयन कज्ज्वल निल नखिते करिया ।

२। विषया लिखिया दिला हरषित हृदया ॥

English Translation.

1. Taking the collyrium from (her) eye with (her) finger-nail.

2. She very gladly, wrote (the word) *Vishyā* (विषया) [In place of the word *Visha* (विष)].

On perusing the letter and noticing the peremptory tone of the order contained therein, Madana immediately gave his sister Vishayā in marriage to Chandrahamsa.

Seeing that his machinations had been frustrated, Dhrshtabuddhi became still more enraged and became determined all the

more to kill Chandrahamsa in the temple of the goddess Chandi notwithstanding the fact that he was now his son in law. But this nefarious design of his was also baffled, because, owing to a strange mistake, his son Madana was killed. Being greatly sorrow stricken at this divine retribution, Dhṛatibuddhi committed suicide. But he was miraculously restored to life by Chandrahamsa whom he had plotted so much to kill, and who, in due course, became the Raja of Kaundinyapura.

There is another version of the foregoing story which is as follows :—

Chandrahāsa was a Rājā. As he was very beautiful, he was called Chandrahāsa. It is said that, during his infancy he was brought up in another Rājā's kingdom, as his father was at that time, very much poverty-stricken. Being charmed with his beautiful appearance, his foster-father brought him to the notice of the Rājā of that kingdom, who however, adopted him and ordered him to be brought up as a *dāsiputra* (or concubine's son) in his own palace.

On one occasion this Rājā entertained, at a great feast, all the Brahmins of his kingdom. Mistaking Chandrahāsa to be the Rājā's son in law, the assembled Brahmin guests talked with him.

Seeing this, the Rājā became very much angry with Chandrahāsa and ordered his executioners to kill the latter immediately. Feeling pity for him, they spared his life and cut off only the superfluous finger of his hand. They went away with the blood and showed it to their royal master.

So Chandrahāsa began to live alone in the forest. To this jungle another Rājā came a hunting and, seeing him, was greatly fascinated by his beautiful appearance. He, therefore, took the latter to his own kingdom. This Rājā subsequently sent him to his former foster-father—the first Rājā. Seeing him alive the latter again became exceedingly wrath with him and resolved once more to kill him.

With this object in view, the latter Rājā wrote a letter and entrusting it to Chandrahāsa, sent him to deliver it to

his son who was living, at that time, in a garden situated at a distance. *In this letter, the Rājā ordered his son to kill Chandrahāsa by giving him poison (visha). But, mistaking the meaning of the word visha (विष), the Rājā's son gave his sister Vishayā (विषया) in marriage to Chandrahāsa.*

When Chandrahāsa returned safe and sound to the Rājā, the latter's rage knew no bounds; and he again determined to kill his son-in-law. With this object in view, he sent Chandrahāsa and his daughter Bishayā to the temple of Kālī for the purpose of doing obeisance to that goddess. With them, he also sent several worthy executioners with orders to kill Chandrahāsa at once. It is said that, for some miraculous reasons, all the other members of the Rājā's family who had also gone to the temple at that time died mysteriously. Hearing about this unforeseen calamity, the grief-stricken Rājā himself went to the temple, and for the purpose of putting an end to his sorrows, committed suicide. Thereafter Chandrahāsa ascended the throne and became the Rājā of that country.

On comparing the first version with the second, we find that the two differ from each other in the following respects:—

(1) In the first version, the hero is named Chandrahamsa. But, in the second one, he is named Chandrahāsa.

(2) In the first version, Chandrahamsa was brought up by his maternal grandfather who was also a Rājā and who was subsequently murdered by his wicked minister Dhrshtabuddhi. But, in the second version Chandrahāsa was brought up by a stranger Rājā as his *dāsīputra* or concubine's son.

(3) In the first version, the wicked minister Dhrshtabuddhi, who had murdered Chandrahamsa's maternal grandfather, became jealous of Chandrahamsa, because some astrologers had predicted that he would become a Rāj Chakravartti. He therefore, ordered his executioners to kill Chandrahamsa. But the executioners feeling compassion for Chandrahamsa, spared his life and, having killed a dog, brought its blood and showed it to the minister as that of Chandrahamsa. In the second version the

Rājā became jealous of Chandrahāsa, because some of the former's Brahmana guests had mistaken Chandrahāsa to be the former's son-in law. He therefore, decided to kill Chandrahāsa and ordered his executioners to slay the latter at once. But the executioners, feeling pity for him, spared Chandrahāsa's life and having cut off the superfluous finger of latter's hand, brought the blood and showed it to their royal master.

(4) In the first version, when Dhṛṣṭabuddhi discovered that Chandrahāsa was alive and was being brought up by the co-minister Kalinga, he with the latter's permission, sent Chandrahāsa with a letter to his son Madana who was living in his pleasure-garden. In the second version, when the Rājā discovered that his *śiṣya* Chandrahāsa was alive he sent Chandrahāsa to deliver a letter to the former's son who was then living in his garden.

(5) In the first version, the wicked minister Dhṛṣṭabuddhi wrote in the letter a message to his son Madana peremptorily ordering the latter to kill Chandrahāsa by giving him poison (*bīṣa*). In the second version also, the wicked Rājā wrote in the letter a message ordering his son to kill Chandrahāsa by giving him poison (*bīṣa*).

(6) In the first version, Chandrahāsa fell asleep in the garden and the letter was read by Dhṛṣṭabuddhi's daughter Bishayā, who being horrified by reading about her father's cruel orders substituted the word "*Bīṣayā*" for "*Bīṣa*" in the letter. Reading this substituted letter, Madana gave his sister Bishayā in marriage to Chandrahāsa. In the second version, the Rājā's son mistaking the meaning of the word "*Bīṣa*" gave his sister "*Bīṣayā*" in marriage to Chandrahāsa.

(7) In the first version, when the wicked minister Dhṛṣṭabuddhi discovered that his nefarious plot had failed, he sent Chandrahāsa and his son Madana to the temple of Chanḍī so that Chandrahāsa might be killed there by his executioners. But by a divine retribution his son Madana was killed instead of Chandrahāsa. At this unforeseen calamity, Dhṛṣṭabuddhi was greatly sorrow-stricken and committed suicide. In the second

version, when the wicked Rājā discovered that Chandrahāsa was alive and had been married to his daughter, he sent Chandrahāsa, along with the other members of his family, to the temple of Kālī so that Chandrahāsa might be killed there by his executioners. But, by some strange irony of fate, Chandrahāsa's life was saved, but all the other members of his family were killed. In a fit of grief, the Rājā went to the temple and committed suicide there.

(8) In the first version, Chandrahāsa takes generous revenge by restoring his wicked father-in-law Dhṛṣṭabuddhi to life and, then, became the Rājā of the country. But, in the second version Chandrahāsa did not show any such generous revenge. He, at once, ascended the throne and became the Rājā.

The second of the foregoing stories is embodied in ancient Buddhist literature and is recorded in Buddhaghosa's *Commentary on the Dhammapaṇḍa* (Book II 1-3, LV. 21-23.) This Buddhist folktale is entitled: "*The Rise and Career of the Treasurer Ghoshaka.*"*

The incidents of this Buddhist tale may be summed up as follows.—The Treasurer attempted once more to kill Ghoshaka. He therefore penned a letter to the Superintendent of his estates, in which letter he addressed the following request to the latter:

"This is my base-born son. Kill him, and I shall do what is right for you." Having written this letter, he fastened it to the hem of Ghoshaka's wearing garment, and ordered the latter to go and deliver it to the Superintendent.

The Treasurer had not taught his son Ghoshaka to read, simply because he desired to kill the latter sooner or later. Having received the letter, Ghoshaka expressed a desire to be supplied with some food for himself to eat during his journey to the Superintendent's house. But the Treasurer refused to accede to his son's very reasonable request by saying: "There is no need for you to take any food with yourself. In such and such a village, there lives a friend of mine. He is also a treasurer

* Vide Burlingame—Buddhaghosa's *Dhammapada Commentary*. (*Proceedings of the American Academy*. 45-20, page 504.)

and, when you will stop in his village, he will give you some food to eat."

When Ghoshaka arrived at the village-treasurer's house, the latter's wife conceived a liking for the newly-arrived guest, while the treasurer's daughter was smitten with a sudden and strong passion for Ghoshaka. [The fact of the treasurer's daughter having fallen madly in love with Ghoshaka may be explained by the reason that she was his wife in a previous state of existence at Kotuhalaka. It was by virtue of the merit she acquired by giving alms to the private Buddha that she had been re-born as the village-treasurer's daughter]

When the village-treasurer's daughter found out, to her horror, that the letter which Ghoshaka was conveying contained an order to the addressee, directing the latter to kill the former immediately, she stealthily took it away from him and destroyed it. Then she wrote a fresh letter and, substituting it for the one that had been destroyed, tied it up in Ghoshaka's garment. This fresh letter contained the following message—

"This is my son Ghoshaka. Bestow treasure on him. Prepare for the festival of his marriage with the daughter of the village-treasurer. Build him a splendid palace and provide him with a strong guard of soldiers. When you have done, send me word saying 'I have done this and that'."

When the Superintendent perused this letter, he immediately carried out the behests contained therein.

A study of the foregoing two ancient Indian tales has enabled us to catch a few glimpses of life in ancient India. We have learnt therefrom that—

(a) In those far-off times, Indian women knew how to read and write;

(b) The use of a writing material like paper, of pen and ink was known;

(c) The Indian girls used to be given away in marriage after they had attained to young womanhood.

(d) The girls used to paint their eyelids with collyrium

(e) The wealthy men possessed splendid palaces and pleasure-gardens.

(f) The Rājās and other wealthy men kept in their harems concubines or *dāsīs*, and that the sons begotten of these women used to be brought up by them as *dāsīputras*.

(g) The worship of the goddess Kālī and of her incarnation Chandi was very popular.

(h) The sacrifices of human beings used to be offered to propitiate these two goddesses.

The third Indian folktale of this type, which is known to us up till now, is that entitled "*The Son of Seven Mothers*." It is current in the Punjab. It was originally published in *The Indian Antiquary*, Vol X, pages 147 ff, then republished in Steel and Temple's *Wideawake Stories*, pages 98—110; and again published in Mrs. Flora Annie Steel's *Tales of the Punjab* (London Edition of 1894), pages 89—101. It has been subsequently re-edited with notes by Mr. Josephs Jacobs under the title of "*The Son of Seven Queens*" and published in *The Indian Fairy Tales*, pages 115—126. The *motif* of this story is that a certain king becomes deeply enamoured of a beautiful white hind with golden horns and silvern feet, who is afterwards metamorphosed into a beautiful maiden. But she was, in fact, a cunning white witch. When the king proposed to marry her, she said that she would agree to be his queen on the sole condition of his giving her the fourteen eyes of his seven queens. The king was so much infatuated by her that he very readily and actually plucked out the eyes of his unfortunate Rānīs and gave them to the witch who strung them into a necklace and presented it to her mother.

The son of the youngest queen, who was called "the son of the seven mothers", was attempting to restore the eyes to his mothers. But the white witch, however, desired to kill the boy *With this object in view, she despatched him to her mother with a potsherd which had the following words written upon it:—*

"Kill the bearer at once, and sprinkle his blood like water."

As the prince did not know how to read and write, he had no inkling of what was written upon the potsherd. While he was going on this errand, he was seen by a princess who fell immediately in love with him. She was exceedingly intelligent and learned and somehow or other got hold of the potsherd. She was horrified on reading the message inscribed thereupon. She threw it away and taking a potsherd of similar shape and size, wrote on it the following fresh message —

"Take care of this lad. Give him all he desires." The witch's mother, on reading the message written upon ~~the~~ substituted potsherd made over to the prince the necklace of thirteen eyes (for a hog, being very hungry had eaten up the remaining eye) and the Yogi's cow, with which he returned home.

The only European parallel which is known to me, of the foregoing Indian folktales is the story entitled "*The Giant with the Three Golden Hairs*" which is included in the collection made by the Brothers Grimm. In this folktale, it is stated that a young man, whom the king of the country wished to kill, was sent by the latter on an errand to deliver a letter which he had written to the queen. In this letter, the following instructions were written to his consort: "As soon as the bearer of this letter arrives, let him be killed and immediately buried." The young man, who was wholly ignorant of what had been written in this letter somehow lost his way and took his shelter in a hut which belonged to some robbers and fell fast asleep there. While he was sleeping, the robbers opened the letter which the young man was carrying and were horror-stricken to read the contents thereof. With the object of saving the young man's life, their leader wrote a fresh letter which purported to have been written by the king himself and in which the queen was instructed to marry the young man to the princess, as soon as he would reach there with the letter.

In the meantime, the robbers let him sleep on till the day dawned. When he awoke from his sleep, they showed him the right way to the queen's palace. Proceeding by this way,

he arrived at the queen's palace and delivered the letter to her. She agreed to marry her daughter to him on condition that he would bring the three golden hairs which grew on the head of a giant who lived in some far-off country. He, however, succeeded in bringing the golden hairs, after experiencing great difficulties and troubles on the way, and was thereafter married to the princess.

In this parallel, we find that the life-giving letter was substituted for the fatal epistle, not by a woman, but by some robbers. In any case whatever, this parallel also includes the incident of "*The Substituted Letter*".

The Folklore Society of London, assisted by Mr. Josephs Jacobs and Rev. S. Baring-Gould, has classified folktales and formulated seventy story-radicals* which fit into them. But the story-radical, which I have framed and set forth in the opening paragraph of this paper, for the preceding four tales, is not to be found among these 70 story-radicals. These four stories, therefore, belong to and must be classified under, a new group or type which I have named "*The Substituted Letter Type*".

I hope that folklorists in Europe and America will accept this new type which I have formulated and am publishing for the first time.

No 18, Champuker Street, dated the 15th June, 1929.
Calcutta,

* *The Handbook of Folklore* By C. S. Burne, London. Sidgwick and Jackson, Ltd., 1914. Pages 344—355.

VII—On an Ancient Indian Beast Apologue and its Panjabi Parallel

By Professor Sarat Chandra Mitra, M. A. B. L.

Beast tales are folktales in which animals are actors, who speak and act like human beings. On the other hand, apologues are stories with a conscious purpose and a moral, and are thus closely related to proverbs.

There are some folktales which possess the characteristics of both beast-tales and of apologues. That is to say the actors in these stories are animals who speak and act like human beings. But at the same time, these stories inculcate a moral or ethical teaching. I shall, therefore, call these peculiar folktales "*Beast-apologues*."

The *Panchatantra* is the most ancient collection of fables in Sanskrit. It existed in the first half of the sixth century of the Christian era. It appears to have been originally composed for the instruction of Kings' sons in the principles of good conduct (*arshi*). It is a kind of "*Mirror of Princes*."

This collection of ancient Indian fables includes a story or beast-apologue which illustrates the triumph of the intellect over brute-force. In this beast-tale a weak and puny hare brings about, by the exercise of his keen intellect, the death of a strong and powerful lion. The whole of this beast-apologue runs as follows —

A lion named Durdanta lived on a mountain called Mandara. He used to kill unnecessarily a large number of animals daily. Thereupon all the animals of the mountain, in a body, went to him and represented their grievance to him, saying; "Your Majesty! what is the necessity of your killing so many animals daily when only one is sufficient for your food? We will, for this reason, send you one animal every day."

To this proposal the lion agreed; and from that day forward, he used to feed upon the animal which was sent to him daily.

Now, one day, came the turn of an old hare who thus thought within himself :—

“A person, in the hope of saving his life, may make supplication to one whom he fears. But when I am sure to die, why should I, then, make supplication to the lion? I shall therefore, appear before him walking at a very slow pace.” Accordingly the hare presented himself before the “King of the Beasts” with measured steps and slow. Seeing the puny hare, the lion, hungry and burning with rage, asked him the reason of his coming to him so late.

The hare replied : “Sir, I am not at all to blame for this delay, for, when I was coming to you, another lion seized me by force. But having promised to him that I would return to him shortly have come hither to represent the matter to you.”

Having heard this, the lion replied : “Just show me the place where this vile wretch ves.”

At this, the hare took him to a deep well and said : “Sir, come here and see him with your own eyes.”

Saying this, the hare showed the lion the latter's own shadow reflected in the water of the well. Thinking the reflected shadow to be his rival, the lion, burning with anger, threw himself into the well for attacking him and was killed.

The Rev. Charles Swynnerton collected from the peasantry of the Upper Punjab a number of short household stories which have been publised by him under the title of “*The Adventures of the Punjab Hero Rājā Rasālu and other Folktales of the Punjab.*”

This collection of tales, which were taken down from the lips of the Punjabi and the Pathan peasants, contains the following beast-apologue which is exactly similar, in its main incidents, to the beast-tale given in the *Panchatantra* :—

The Tiger and the Hare.

Once upon a time, there lived in a forest a fierce tiger who used to kill the remaining animals of that jungle for mere ports, no matter whether or not hunger impelled him to do so. The panic-stricken animals, therefore, assembled and resolved

that they should represent to the tiger the uselessness of this wanton destruction of animals, and thereby come to some arrangement with him so that their lives might be saved.

They therefore, went to the tiger and said : ' Do not hunt us down, for one of us will always come to be devoured by you, and this plan will save your troubles as well ' "

" No, no," said the tiger, " I shall use my claws and my teeth and so eat my food."

" But" said the animals, " God has said that we ought to live in hope "

" True," answered the tiger, " but he has bidden every one to earn his own bread. '

At last, after much discussion, the tiger promised to remain in his den and refrain from the indiscriminate slaughter of beasts.

Every day, an animal, who had been selected by lot, was sent to the tiger's den to be eaten by the latter. But, when the hare's turn came, she flatly refused to go, saying : " I shall live my life "

The other beasts, in vain, tried to induce or coerce the hare to go. But she refused to do so, and stayed back in the jungle till late in the afternoon. At that late hour, she suddenly changed her mind and started to go to the tiger's den.

When the hare approached close to the tiger's den, the tiger who was foaming with rage and hunger saw the hare coming slowly, and, seeing her, exclaimed : " Who is the ridiculous little hare who dares to keep me waiting? "

But the hare replied " Your Majesty, I have an excuse for this delay "

" What is the excuse? " demanded the tiger.

But the hare replied " It is not my turn to come here to-day. It was the turn of my hare who is plump and fat. As he was coming hither he met another tiger who caught him and was carrying him away. Then I interposed and said : ' Who are you to carry away my brother? This country is

not yours. But it belongs to another tiger." To this, the strange tiger answered. "Go you at once, and call that tiger out. And then he, and I will have a fight." Sir! I have, therefore, come to deliver his challenge. Come and kill the villain first.

Then led by the hare, the tiger went to that part of the forest where the rival tiger lived. After making pretence of being afraid of the latter, the hare took the first tiger to a deep well and showed him the reflection of his shadow in the water of the well.

Thinking the reflection of his own shadow to be his rival, the first tiger with a terrible roar, leapt into the well to attack the latter and was thereby killed therein.*

If we will carefully compare the beast-apologue as given in the *Panchatantra* with the Punjabi household tale, we will find that the parallelism between the two is complete, with this much difference only, namely, that the tyrannical beast-king in the former is a lion, whereas, in the Punjabi story a tiger has taken the lion's place.

Now, the question arises - 'How has this parallelism come about?'

My answer to this query is that the fables of the *Panchatantra* were current all over India and were carried even to Europe. It is no wonder that these stories must have been heard by the Punjabi and the Pathan peasants of the Upper Punjab, among whom they appear to have been current since the first half of the sixth century A. D., in an almost unaltered form. They have modified the *Panchatantra*-fable only by introducing the tiger there into the place of the lion.

Both these beast-apologues inculcate the moral that, even a weak-bodied and puny a little creature can by means of its keen wits, bring about the destruction of a strong and powerful beast.

**The Adventures of the Punjab Hero Rājā Rasālu and Other Folktales of the Punjab* By the Rev Charles Swynnerton, Calcutta W. Newman and Co. Ltd, 1884 Pages 180-183.

I have already shewn elsewhere* that strikingly similar to the preceding *Panchatantra* tale is the Malay story entitled : *The Tiger and the Shadow*, which was collected from the Malayan peasantry by the members of the Expedition which was sent by the University of Cambridge in 1899 to explore the remoter states of the Malay Peninsula. This tale, along with others, has been published by Mr W Skeat under the title of "*Fables and Folktales from an Eastern Forest*"

*Vide my article entitled 'On the Malay Versions of Two Ancient Indian Apologues' in *The Journal of the Anthropological Society of Bombay* (Silver Jubilee Memorial Number of 1911), pages 67-75.

VIII.—Kalinganagara and Excavation at its present site.

By Prof. B. C. Bhattacharya, M. A.

In the last issue of this journal, Mr B. V. Krishnarao contributed an article entitled "The identification of Kalinganagara" and expressed his unqualified conviction in favour of his new identification, which is, in fact, an old one, attempted long ago by Mr. G. V. Ramamurty in the pages of *Epigraphia Indica*, Volume IV, 1896-1897. From the present article, reiterating the old views of Mr. Ramamurty, scholars can derive no fresh information of any importance. Before controverting the writer's arguments, let me first summarize the main points, upon which both the old scholar Mr. Ramamurty and the present scholar Mr. Krishnarao have based their identical conclusion.

A. Kalinganagara, the old capital of the Kalinga country, is to be identified with the present site of Mukhalingam or the joint site of Mukhalingam and Nagarakatakam, situated on the bank of the Vamsadhārā and at a distance of about 30 miles from the sea. This identification has been arrived at by both the writers from the evidence of some dedicatory inscriptions found in the temple of God Madhukēśvara. The inscriptions differently refer to a 'Nagara' of Kalinga, which they ask their readers to understand as Kalinganagara. The passages occurring in the inscriptions are. *Kalingāvanṭi Nagare*, *Kalinga-Deśa-Nagare*, *Nagare Madhukēśvarāyam* (the word 'Kalinga' omitted).

B. The copper-plate inscription of Anantavarman, dated 1040 of an unspecified era, edited by Fleet ⁽¹⁾ records the fact that Kāmārṇava II, the nephew of Kāmārṇava I, had a town named "Nagara," in which he built a lofty temple for an emblem of God Īśa in the *linga* form to which he had given

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the name of "Madhukesi" because it was produced by a Madhuka tree. The temple still exists at Mukhalīngam. The inscription further informs us that Kāmārṇava I, the alleged founder of the Gaṅga dynasty, had for his capital the town named Jantavuram. Mr Ramamurty gave the following equations on the authority of a *Kṣetrasūktīśya* :—

Jantavuram = Jayantapuram = Madhukēśvaram =
Mukhalīngam

Mr Krishnarao, however, proves at length the error of this identity and believes that the Jantavuram is a misreading for Dantavuram to be identified with Dantapuram. The word "Nagara" mentioned in the inscriptions of Kāmārṇava II is to be taken as "Madhu-Kēśa" in the opinion of Mr Ramamurty and as Nagarakaṭakam in Mr Krishnarao's opinion.

C Both the scholars undoubtedly affirm that *Nagarakaṭakam* means a *Royal residence in Nagara* and therefore it is to be equated with Kalinganagara, the famous capital of Kalinga.

D The sea port place Kalingapaṭam showed to both the scholars no ancient site nor any ruins worth consideration whereas the Mukhalīngam site furnished them with old bricks, ruins of temples, carved pillars of some past age. Hence the latter is to be archaeologically judged to be the site of the ancient capital Kalinganagara.

E. Mr Krishnarao quotes from an inscription found in the temple of Mukhalīngēśvara which records a grant to the dancers and musicians of the God Madhukēśvara issued from *Kalinganagara* itself by Anantavarman and feels convinced that the form "*From Kalinganagara*" is to be interpreted as "*In Kalinganagara*." He writes, "*Śaṣṭi ! Śrīmat Kalinga-sagarāḥ !* etc." meaning "Hail ! From the Victorious Kalinganagara." Thus, when there is a record concerning the dancers and musicians of the temple of Madhukēśvara in Kalinganagara, issued from and inscribed in a prominent place in the temple itself, in Kalinganagara, what stronger proof is required to identify Mukhalīngam and Nagarakaṭakam with the ancient Kalinganagara ?"

Having outlined the principal contents of the papers in question, let us now examine how far the arguments advanced may be regarded as conclusive. Mr. Krishnarao has evidently fallen into an error in his supposition that the place, whence the royal grant had been issued and the place wherein it is found now are one and the same. In all such inscriptions referred to by him, it is definitely stated “*Kalinganagarāt* (i.e. from Kalinganagara) and not *Kalinganagare* (in Kalinganagara). Therefore such conclusion is absolutely unwarranted and groundless. There can be no objection, however, to his identification of Mukhalingam with Madhukēśvara or Madhukalingam. But the passages occurring in the Mukhalingam inscriptions, viz, *Kalingāvanī Nagare*, *Kalingadeśa Nagare* can mean in Sanskrit no more than a town in the country of Kalinga or the town named *Nagara* in the Kalinga country (*Deśa*). If the author of the inscriptions meant to denote Kalinganagara, he would have mentioned it simply as in all other cases and not interposed unmeaningly *Avanī* or *Deśa* in the expressions. Kalinganagara is a proper name and an early recorded name. May we modestly ask the writer if he can show any instance in which such a proper name has been found split up? Further, we meet with, in another instance, the expression *Nagare Kalinga Deśe*, which it has been ridiculous for the writer to transpose and make somehow “Kalinganagara” for the mere sake of argument. We have multiple instances, as will be shown later, where Kalinganagara has been straightway mentioned.

As regards the identity of *Jantavuram* with *Jayantapuram* of the *Kṣetramāhātmya*, I have reason to agree with Mr. Ramamurthy. Here, Mr. Krishnarao attacks it and strongly believes that Jantavuram is a misreading. It may or may not be so as we have no means of examining the facsimile of the inscription. At the same time, I may point out that the name Jayantapuram for a town in Kalinga is not purely fanciful. I found the mention of this name in Pāli form in the Vessantara Jātaka, where it appears as Jayatura. I quote the passage, “In the Jambūdvīpa of a former age, the principal city of Sivi was

called Jayatura

The country of Chetiya and the city of Jayatura became as one. At this time there was a famine in Kalinga, from want of rain (1) This clearly proves the existence of the town Jayatura or Jayantapura in the Buddhist age. It also shows that the country of Chetiya and the city of Jayatura were in Kalinga and were under different rulers. This reference makes clear that the country of Chetiya was ruled by the Chetis, a tribe of the 16 Janapadas, whose identity has been so long a matter of conjecture (2) There is hardly any doubt, that Kharavela who calls himself "*Cheta raja vasa vadhana*", (3) was descended from this tribe of Kalinga. Thus, the existence of Jantavum or Jayantapura or Jayapura, another name of Mukhalingam or Madhukeshvara can be historically proved. According to the copper plate inscription of 1040, Karmarava II had a town named simply *Nagara*, where he built a temple of Siva under the name Madhukeshvara. Mr. Krishnarao is nearly right in holding this *Nagara* to be identified with *Nagarakatakam*, a village in the neighbourhood of Mukhalingam. He should have been more right in stating with Mr. Ramamurty that both *Nagarakatakam* and *Mukhalingam* were comprised in one area which as a whole bore the proper name *Nagara*. So far there is no disagreement. But I have every question to raise against the assumption that this *Nagara* was ever meant to be *Kalinganagara*, a special name borne by so many authentic records. At least this identity can hardly be authenticated by the same record, where unlike *Nagara* the famous name *Kalinganagara* is conspicuous by its omission.

As to the proposition marked C, I quite agree that the word *Kataka* means either a capital or a royal camp. Thus

(1) The *Vasamtara Jataka*, quoted in Hardy's "A Manual of Buddhism," p. 165 off.

(2) *Buddhist India*, p. 23. The late Prof. Rhys. Davids repeating the word, "probably" tried in vain to identify the Chetis with one or the other tribe of earlier origin but did not come to any conclusion.

(3) J.B.O.R.S., Volume III, part IV pages 453. The Hathigumpha Inscription, edited by Mr. E. P. Jayaswal.

Nagarakataka may mean the capital known by the name *Nagara* but it is not to be mistaken with the *Kalinganagar*, distinctly mentioned as such in all inscriptions (1)

Thus it can almost be concluded that neither Mukhalingam nor Nagarakatakam ever bore the epithet *Kalinganagara* to be gathered from any testimony of the Mukhalingam inscriptions. Where is then the present site of Kalinganagara?

Let us now turn to some unquestionable documents, both literary and epigraphic, and see what light they throw upon this identification. I may unhesitatingly remark that they are unanimous in locating Kalinganagara on the sea coast, sometimes by clear mention, sometimes by unmistakable suggestions.

The earliest reference to Kalinganagara is to be met with in the famous Hāthigumphā Inscription of Emperor Khāravela. Both Mr Ramamurty and Mr. Krishnarao seem to have lost sight of the valuable internal evidence, which this inscription renders to the identification of Kalinganagara. King Khāravela clearly mentions in his inscription that just after his coronation, in the first year of his reign, he repaired his capital *Kalinganagara*, of which the gates, city-walls and buildings had been destroyed by storm (*Vāta-vihata-Gopura-pālāra-nivesanaṁ pati-Samkhārayati Kalinga-Nagaraṁ*). (2) The storm which felled down the strong royal gate, city-walls (i.e., fort-walls) and buildings, must have been a violent one. This undoubtedly proves the metropolitan city being situated on the sea-side as such furious hurricanes are only commonly experienced in seaport towns on the east-coast. I believe, the writers know very well a great hurricane, which blew over Kalingapatam in 1924 and levelled to the ground most of the houses of the locality. I am sure, the village of Mukhalingam situated far from the sea in the interior had never been damaged by any storm of

(1) Mr Krishnarao believes without ground that Kalinganagar has been shortened into Nagar. We have no proof that other capitals of Kalinga like Dantapura, Simhapura had ever been abbreviated into *Pura* only.

(2) Vide Mr Jayaswal's edition of the Hāthigumphā Inscription, J B O R S Vol III, pt. IV, p. 454, and his further readings in the same journal,

this description. Further the name 'Khāravēla' suggests its intimate connection with the sea or ocean. Mr Jayaswal has rightly interpreted the word "Khāravēla" or Kāravēla meaning the 'Ocean' lit. "one, whose waves are brackish (1)" The word *Vēla* means 'a coast' and *kāra* means 'saline.' Indeed the saline coast and the saline water in Kalingapatam are the first thing which strikes a visitor there. (2)

It is very strange to notice that Mr Krishnarao, evidently a Sanskrit scholar, has tried to brush away the evidence of the Raghuvamśa bearing upon the sea-side capital of the Kalinga king. It is difficult to follow his argument that as the date of Kālidāsa is yet uncertain, his references to geographical places should also be regarded as uncertain. What has Kālidāsa's date to do with his descriptions? So far as I know that the accuracy of Kālidāsa's geographical knowledge of India has never been challenged by any other scholar. On the contrary, his references to peoples and places have been vastly utilized by scholars for determining many historical facts. The anterior limit and the posterior limit of his time have been established beyond all possible doubts. He either flourished in the first century B. C. or in the reign of Chandragupta II or his successor, i. e., in the fourth or fifth century A. D. In either case, specially in the former, he was nearest in time to Khāravēla and was expected to know much of the situation of Kalinganagara. (3) The descriptions of Kālidāsa regarding the Kalinga capital cannot be easily misunderstood. In connection of

¹ J. B. O. R. S., Vol III, part IV p. 434.

² The environment in most cases influences a man's life. I met a gentleman in Kalingapatam, who eats coconuts so excessively that he goes so far as to call himself a *Kobribai* or coconut itself. Curiously enough I find in Buddhist lit. the name of a king *Nārikera* of Kalinga. Presumably the name was derived from *Nārikela* (coconut) so common on the east coast. See "Manual of Buddhism" p. 55.

³ In the time of Samudragupta, the king of Kalinga was Damana, whose capital was at Erandapalla identified with Erandol near Chikacole. Thus, Kālidāsa's descriptions of Kalinga capital applies more to Khāravēla's Kalinganagar than to Erandapalla far from the sea.

Indumati's *Svayamvara*, Sunandā, her companion, took the royal princes to the king of Kalinga, named Hemāngada and described him as the ruler of a kingdom of which the Mahendra Hill and the sea were the two natural boundaries. The place is described as being just on the sea-beach. ".....The sea itself, the waves of which are seen from the windows of his palace, and the deep resounding roars of which surpass the sound of the watch-drum being close at hand, awakes him as it were, when slept in his palace-room. Sport, O Princess, with this king on the sea-shore, where the palm-trees grove make a rustling noise." (1)

This is a clear proof of the sea-side capital of the king of Kalinga as Kālidāsa knew of it. If it were a solitary instance in this respect, we would have ignored it. But all the references to the Kalinga capital as found in different Sanskrit books speak the same thing, i.e., the situation of the capital on the sea and therefore, emphatically confirm the correctness of Kālidāsa's description.

We read in the *Dasakumāra-Carita*, the Kalinga capital has been mentioned as Kalinganagara. Mention is made of the Kalinga-Rāja named *Karddana*, as amusing himself with his friends and family in a sportive party on the sea-beach (2).

The reference to Kalinga in the *Mahābhārata* is equally illuminating. Arjuna entering the Kalinga-gate (Kalinga-Rāstra-Dvara) came to the sea-side. Thence, returning, he went to the Mahendra Hill. (3)

¹ यमात्मनः सञ्चानि सन्निकृष्टो—

मन्द्रध्वनित्याजितयामतूर्यः ।

प्रासादवातायनदृश्यवीचिः

प्रबोधयत्यर्णव एव सुप्तम् ॥

अनेन सार्धं विहराम्बुराशे—

स्त्रीरेषु तालौवनमर्मरेषु ॥ Raghava mēsa, Canto VI, verses 56, 57.

² राजाधिराजनन्दन, नगरम्बुगतस्य ते गतिं ज्ञास्यन्नहं च गतः
कदाचित्कलिङ्गान् । कलिङ्गनगरस्य नात्यासन्नसंस्थित जनदाह

सुविज्ञाकेल



FIG. 104



FIG. 105



FIG. 106

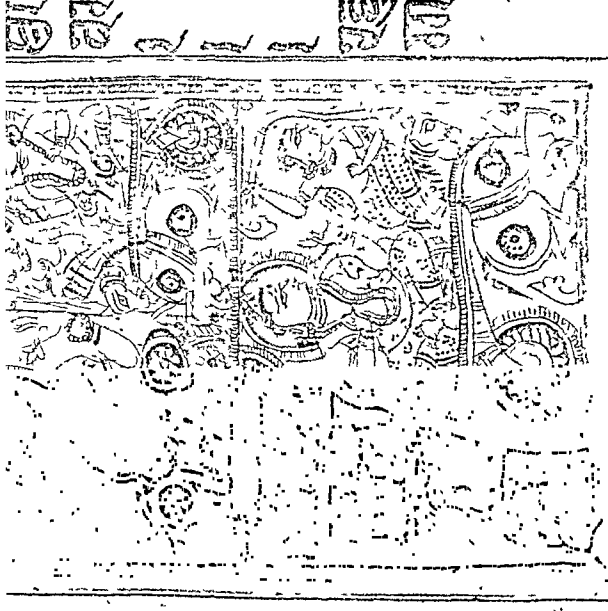
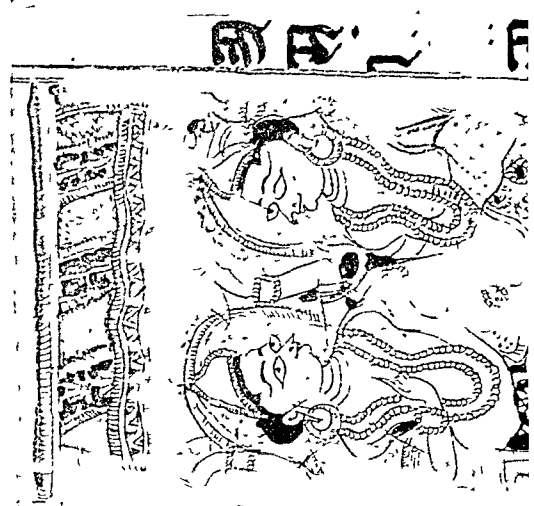


FIG. 103



मः पञ्चमः पञ्चमः

मोक्षः



FIG. 109

तामरां तादागुणं अतिदा
 रिक्तममीदृशकदावतिनि
 दंक्रमारअगारमालवस्मि
 न्गुणरविलाअतिदि डीया
 प्पिण्हियावदि तासवसधे
 मः पञ्चमः पञ्चमः

ILLUSTRATIONS AND DESCRIPTIONS

PLATE 32

FIG. 107 He 90x Krishna urges Aristanemi to marry Implied in KS 172 (Jtr 277) See under figure 106

Krishna and Nemi again appear at the bathing ghat (notice the different treatment of the water) Krishna, four armed is at the left Nemi at the right Overhead is a canopy Two scenes in one (a) Aristanemi riding to the

FIG. 108 Tr 68r (cf C 52 pl XIV 80) Implied in KS 173 (Jtr 277) but explicit in Devendra (CA 414) The bride Rajamati was bathed adorned and seated in her pavilion waiting for the groom He 100 fully adorned mounted an elephant and amid the plaudits of the people advanced toward Rajamati's pavilion Presently he heard distressful cries On asking the charioteer (although he was on an elephant) what these were he learned that they were the cries of the deer and other animals that were to be slaughtered for the wedding feast The thought of the impending death of these creatures produced in Nemi disgust with the world and he forthwith decided to enter the religious life He gave his jewels to the charioteer had the elephant turned around and abandoned the bride-to her great woe—while he prepared to become a houseless wanderer in search of salvation

In the various paintings illustrating this important point in Nemi's life there is apparently a curious confusion in regard to his vehicle which seems to leave traces even in Devendra's narrative It is stated that Nemi went to his wedding mounted upon an elephant yet he addressed his remarks to a charioteer, as is indicated by the Prakrit word *sarathi* (Skt *śārathi*) which normally means the driver of a chariot Hence in the paintings it sometimes happens that Nemi rides in one part of the scene on an elephant and in another in a chariot or in both parts in a chariot

Our painting shows at the top Rajamati seated in a lightly indicated pavilion Approaching her is a two-wheeled and one horse chariot carrying Prince Nemi driven by a charioteer who vigorously flourishes his whip In the lower register on the left in a pen are various animals which are to be slaughtered for the feast At the right is Nemi's chariot which now has turned back

FIG. 109 Ha 99r (cf C 80 pl XIV 80) Two scenes in one (a) Aristanemi riding to the bridal pavilion, (b) Aristanemi decides to leave the world Implied in 173 (Jtr 277) See under figure 108

The representation is essentially like that of figure 108 except that we have here a case where Nemi rides on the elephant in one part of the picture and on a chariot in another (see under fig 108), and Rajamati's pavilion is not shown The elephant's face and trunk are painted like those of elephants in festive and state use today In the lower register Nemi's chariot has four wheels instead of the two in figure 108

PLATE 33

FIG. 110. Hb,88v (cf. C 52, pl. XIV.80). Two scenes in one: (a) Ariṣṭanemi riding to the bridal pavilion; (b) Ariṣṭanemi decides to leave the world. Implied in KS 173 (Jtr 277). See under figure 108.

This full page illustration gives an idea of the importance this scene holds for the Jains; it is one of the best-loved episodes in all Jain hagiography. At the extreme left, in a pavilion minutely decorated with floral motifs and having a peacock on the overhanging cornice, is Rājamatī, whose attitude portrays the agitation and delight which Devendra says she experienced at her approaching marriage to so rare a prince as Nemi. In front of her under the cornice is a maid servant holding out a water vessel. Coming towards the pavilion is the elephant, intricately adorned and painted, bearing richly embroidered trappings and a howdah. Three persons sit inside the howdah; the first, whose greater size alone would show his superior importance, is Nemi holding out an offering. Behind him is an attendant, and at the rear still another, perhaps a fly-whisk bearer (cf. fig. 123), although the fly-whisk is not visible. Behind the elephant is a four-wheeled chariot, in which rides Krishna, four-armed, holding discus and mace, while before him is the charioteer brandishing a whip. At the bottom, on the left, is the pen containing birds and beasts for the banquet. In the center is Nemi, now in a chariot, deserting the bride, as his charioteer urges on the horse; and before him are two attendants, one on foot, the other on horseback.

FIG. 111. Fr,68v (cf. C 58, pl. XXXVI.51). Two scenes in one: (a) Ariṣṭanemi gives away his possessions; (b) Ariṣṭanemi plucks out his hair. KS 172-173 (Jtr 277). Like the other Tīrthankaras Nemi gave alms for a year before leaving the world. He was then honored by Śakra, made to sit in a palanquin, carried through the town of Dvāravatī to a park, where he dismounted under an Aśoka tree. After a six-meal fast¹⁷ he tore out his hair, which Śakra caught. Cf. under figures 70, 73.

The treatment of these episodes in Nemi's career hardly varies from the treatment of corresponding scenes in the lives of Mahāvira and the other Tīrthankaras.

Similar subjects illustrated in figures 70, 91, 124, and in figures 73, 74, 96, 112, 124.

FIG. 112. Ha,100r. Ariṣṭanemi plucks out his hair. KS 173 (Jtr 277). See under figure 111, and cf. under figure 73.

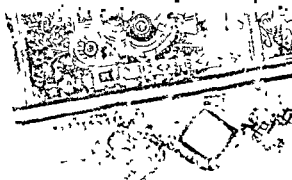
The treatment is essentially that of figure 73.

¹⁷ See footnote under figure 73.



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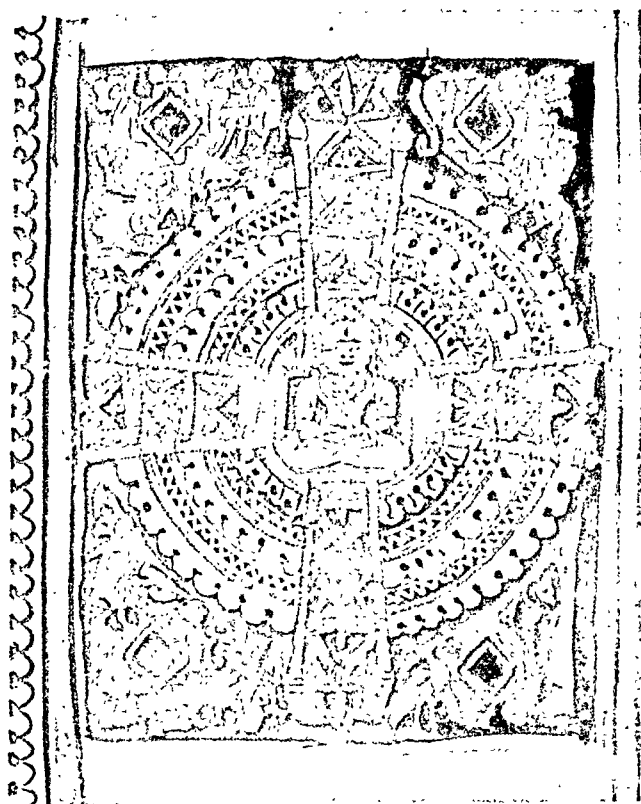


FIG. 113



FIG. 114

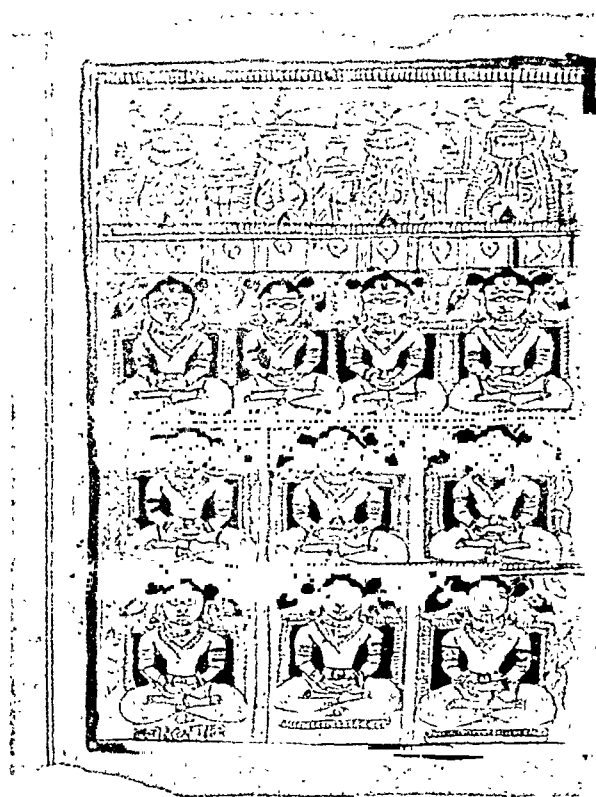


FIG. 115

PLATE 34

FIG 113 Ha 101r Aristanemi's *samatasarana* KS 174 (Jtr 277) After 54 days of austerity on the fifteenth day of the dark fortnight of the month Āṣvina under a Vetasa tree on the summit of Mount Girnar in Kathiawar Aristanemi after an eight meal fast¹⁸ without drinking water, obtained the Kevala (supreme) knowledge and preached in his *samatasarana* which the gods erected Cf under figure 80

The treatment is essentially like that of figure 80

Similar subjects are portrayed in figures 80 99 126

FIG 114 Ha 104r Aristanemi as a Siddha KS 182 (Jtr 278 279) After a life of a thousand years on the eighth day of the light fortnight of the month Āṣḍa having fasted a month without drinking water on the summit of Mount Girnar the Arhat Aristanemi died His soul then went to its abode in Isatpragbhara Cf under figure 81

The treatment is essentially that of the corresponding episode in Mahāvīra's life see figure 81

Similar subjects are depicted in figures 81 100 178

FIG 115 Fr 73r (cf C 48 52 56 pls VIII 48 XIV 83 84 XX 95) Ten Tirthankaras KS 184 203 (Jtr 280) Between the stories of Aristanemi the twenty second Tirthankara and of Rābha the first Tirthankara the KS gives the name of the 20 other Tirthankaras going back ward from Nemi to Rābha and tells us the length of time elapsing between the appearance of the Tirthankaras but omits their stories

The various MSS show the Tirthankaras in groups of 4 10 or 20 A single illustration of one type of representation seems sufficient for our purposes

At the top of this painting over each of the four Tirthankaras on the upper row is the spire of his shrine Only the figure at the left hand side of the row has the cognizance indicated and this I cannot identify Each Tirthankara is apparently in *samatasarana*

There follows here a list of the 24 Tirthankaras with indication of the color in which the body of each is ideally depicted (not observed in our paintings) according to both the Svetambaras and the Digambaras and the cognizance of each again according to the two divisions of the Jains For the Svetambaras I have taken the statements in GI 401 for the Digambaras I have also taken the statements in the same place but supplemented them with information drawn from J Jaini Outlines of Jainism 1916 table opposite p 6 and from a painting belonging to the library of the Pungal Branch of the Royal Asiatic Society Calcutta being MS 1544 60/43

	Tirthankara*	Color		Cognizance	
		Svet	Dg	Svet	Dg
1	Rābha	gold	yellow	bull	bull
2	Ṣyāṣa	gold	yellow	elephant	elephant
3	Sambhava	gold	yellow	horse	horse
4	Ahlamandana	gold	yellow	monkey	monkey
5	Sumati	gold	yellow	curlew	curlew
6	Padmaprabha	red	red	red lotus	red lotus
7	Sudarśa	gold	green (or blue)	svastika ¹⁹	svastika
8	Candraprabha	white	white (or black)	crenate moon	crenate moon
9	Puspādanta	white	white	śalakra (sea monster)	śalakra (or crab)
10	Śūla	gold	yellow	śrīvatsa ¹⁹	śrīvatsa (or pipal tree)
11	Śreyāṃsa	gold	yellow	rhinoceros	rhinoceros (or Garuḍa)
12	Vāsopati	red	red	buffalo	buffalo
13	Vimala	gold	yellow	boar	boar
14	Ananta	gold	yellow	falcon	ram (or bear)
15	Dharmā	gold	yellow	thunderbolt	thunderbolt
16	Śānti	gold	yellow	antelope	antelope
17	Kuṇṭha	gold	yellow	goat	goat
18	Arā	gold	yellow	śaḍbhāṣa ¹⁹	fish
19	Mallī	blue (or green)	yellow	water jar	water jar
20	Yunayvata	black	black (or blue)	tortoise	tortoise
21	Nami	gold	yellow	blue lotus	blue (or red) lotus (or aśoka tree)
22	Aristanemi	black	black (or blue)	conch	conch
23	Pārsva	green (or blue)	green (or blue)	serpent	serpent
24	Mahāvīra	gold	yellow	lion	lion

¹⁸ See footnote under figure 73 In an eight meal fast there are three instead of two days with no meals

¹⁹ For these symbols see under figure 4

PLATE 35

FIG. 116. Ha.110r (cf. C 43, 52, 56, pls. III.72, XIV.88, XX.99). R̥ṣabha in the Sarvārthasiddha (or, Sarvārthasiddhi) heaven. KS 206 (Jtr 281). After living 33 *sāgaropamas* (cf. Kirfel 339) in the Sarvārthasiddha heaven, R̥ṣabha (or Ādinātha, or Ādiśvara), destined to be the first Tirthankara, descended to take the form of an embryo in the womb of Marudevī, wife of the patriarch Nābhi—in those days the institution of kingship had not arisen—in Ikṣvākubhūmī, in the city of Ayodhyā. This took place in the third of the six periods of the present world cycle, as recognized by the Jains, the period in which evil first made its appearance in the world. R̥ṣabha became the first king of men, for with the coming of evil a king became necessary, and he taught men the arts, sciences, and crafts. Then, becoming the first Tirthankara, he instituted the true religion (see Gl 266 ff., and Jo's translation of Hemacandra's *Ṛ*).

The representation is like that of Mahāvīra in the Puṣpottara heaven, in our figure 2.

Similar subjects are portrayed in figures 2, 87, 101, 102.

FIG. 117. Ha.110v. The patriarch Nābhi and his wife Marudevī, parents of R̥ṣabha. KS 206-207 (Jtr 281-282). Marudevī is speaking to Nābhi, and may be considered to be telling her fourteen auspicious dreams to her husband, just as Trīśalā, the mother of Mahāvīra, told her dreams to Siddhārtha—see our figure 35 (from the same MS. as the present painting), which varies from this one in only the most minute details. Nābhi himself expounded Marudevī's dreams, for in those days, as the KS text makes clear, there were no dream interpreters. When the fourteen dreams appeared to Marudevī, the first of them, contrary to the usual order (for which see under figs. 6, 18-33), was the bull. Hence the child was named R̥ṣabha (bull).

The representation corresponds with that of Mahāvīra's parents in figure 35. The legend of this painting is *śrīādīja . siddhārthamarudevī*.

FIG. 118. M 18.104.55v (cf. C 56, pl. XX.100). R̥ṣabha's birth. KS 208 (Jtr 282). On the eighth day of the dark fortnight of the month Caitra, Marudevī gave birth to R̥ṣabha.

The treatment corresponds closely to that of Mahāvīra's birth in figure 58.

Similar subjects are represented in figures 58, 59, 90, 91, 103, 119.



Fig 116

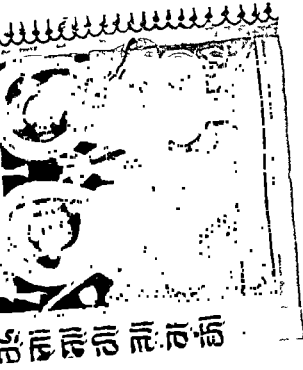
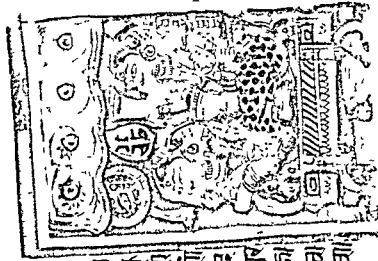


Fig 117

गां। उमा लक्ष्म्या अरुणा कास्य लिगाङ्गाः। कास्य गिद्धाणां प्रहसमास
 पाढा मण्डक चिन्तकाला तस्मात्। चिन्तकालस्य अहमणी
 रकाणां नवसंमामाणां वज्रपादिकाणां। अहमराजं दद्यात्
 जादवश्चास्माह। दिनकरकावणां जादव
 आचाराणां गणपत्याया। रौच्यं जाद
 त्रीनद्यां वज्रकावणां संवा। मिश्रसंभूत
 गामाङ्गां माण्डुस्माणां वहणा। नृधुक् गमाङ्गां। विष्णुं द्रिडङ्गा
 वरुणं मन्त्रं गणपदे। उमा नारायणं। कास्य लिगां कास्य वा
 माण्डुणां तस्मात्। एवमाह। एवमाह। एवमाह। एवमाह। एवमाह।



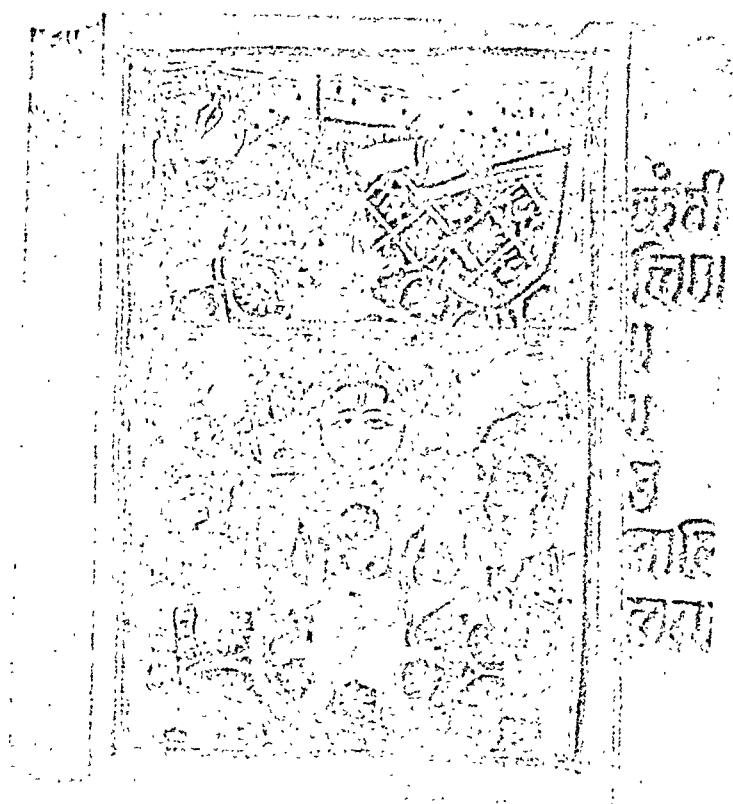


FIG. 119

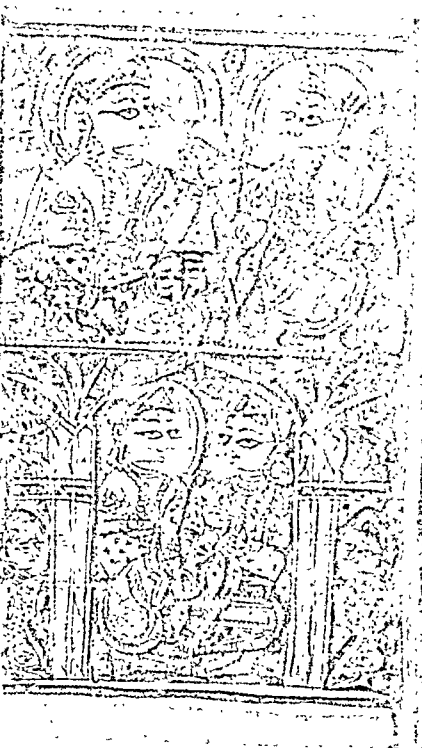


FIG. 120



FIG. 121

PLATE 36

FIG 119 Fr 75v Two scenes in one (a) Rsabha's birth (b) Rsabha's lustration and bath at birth KS 209 (Jtr 282) At Rsabha's birth the gods honored him as the text describes them honoring the other Tirthankaras See under figure 61

The representation of (b) corresponds to that of Mahavira's lustration and bath at birth in figure 61

For figures treating subjects similar to (a) see under figure 118 subjects similar to (b) are treated in figures 61 90 103

FIG 120 Hg 100v Rsabha's marriage Implied in KS 211 (Jtr 282 283) explicit in R 2735 681 (Jo 138 148) At this time there was still no institution of marriage People were born as twins a male and a female destined to live together and have children But one day in those steadily deteriorating times a pair of twins were playing under a palm tree when a fruit fell and hit the boy on the head killing him This was the first accidental death The girl was left alone and troubled The other twins did not know what to do with her and took her to the patriarch Nabhi He said 'Let her be the lawful wife of Lord Rsabha Then Sakra knowing by his clairvoyant knowledge that the time had come for Rsabha's marriage approached and besought him to be married Rsabha knew the time had come and he consented Then the gods made a wonderful marriage pavilion and prepared all the marriage appurtenances Then Suvangala Rsabha's twin and Sunanda the twin whose mate had died accidentally were bathed and adorned by the Apasaras Rsabha was prepared by Sakra wedding songs were sung and the ceremony performed of which the most important feature was the tying of brides and bridegrooms hands with a string The brides attendants sang songs ridiculing the best man Then the garments of the brides and the groom were tied together There followed songs of celebration Numerous other minor details are mentioned by Hemacandra This was a substituted marriage and the ceremonies then observed were the type for the future

The painting shows at the top Rsabha being urged by Sakra to undertake marriage In the lower half of the picture is the pavilion which the gods erected and inside it stand Rsabha and one of his brides (probably meant to represent both) with their hands tied together At the two sides stand bridesmaids

In the manuscript the painting is wrongly labeled *kāśī* polite accomplishments a title belonging to the next painting in the MS (our fig 122) which has no label

FIG 121 Hb 100v Rsabha anointed the first king KS 211 (Jtr 282) Rsabha was the first king and with him the institution of kingship was established Before his time there had been no necessity for a king but in the steadily declining state of the world men had come to need a ruler The KS statement is very bald but a full account is given by Hemacandra (R 2882-911 Jo 148-149) The people chose Rsabha for their king whereupon Sakra's throne shook (cliche motif when anything wonderful occurs) The god came to the spot made a golden dais set a throne upon it brought water from the sacred places and clothed and ornamented Rsabha Then the twins—the people living at that period—brought water but seeing the Lord so well clothed and ornamented they felt that it would be improper to throw water upon his head and so they threw it upon his feet

Our painting shows Rsabha seated on a spired throne before him stands Sakra four armed The attributes of kingship and the vessels for the anointing are lacking but the legend of the painting (*ādirājyābhiseka* Adis royal consecration) indicates the subject This painting is hardly an artistic success the treatment of Sakra's two left arms is especially unsatisfactory

PLATE 37

FIG. 122. Hg.101r. Ṛṣabha teaches the arts. KS 211 (Jtr 282). Ṛṣabha reigned for 6,300,000 *pūrvas* (8,400,000 × 8,400,000) of years as king, and during his reign he taught his people the 72 polite accomplishments (*kalā*), of which writing is the first, arithmetic the most important, and understanding birds' cries the last, the 64 accomplishments (*gūṇa*) of women, the 100 crafts (*śilpa*), and the 3 occupations (*karma*) of men. In R 2,924-984 (Jo 150-156) more details are given, including especially the teaching of pottery, carpentering (with painting to decorate the walls), and weaving.

In the painting we see above Ṛṣabha inventing pottery (see under our fig. 123); below, on the left, is the carpentering (or possibly painting of the walls), and on the right is Ṛṣabha doing the first weaving.

FIG. 123. Ha.112v (cf C 53, pl. XIV.80). Ṛṣabha invents pottery. Implied in KS 211 (Jtr 282); explicit in Hemacandra (R 2,924-951, Jo 150-152). The early citizens suffered from indigestion because they ate their food raw, and as the world deteriorated this could no longer be done with impunity. After offering several suggestions that proved unavailing, Ṛṣabha invented a pot (*kumbha*) for them to cook in, moulding the first piece over the boss (*bumbha*) that is located on each side of an elephant's forehead (for the word *bumbha*, see in the Sanskrit dictionaries, or consult Edgerton, F., *The Elephant-Lore of the Hindus*, p. 117, New Haven, 1931).

In the painting Ṛṣabha sits upon his elephant, which is fully painted and caparisoned, and has its trunk upraised as though trumpeting. In his right hand he holds the first vessel, which he has just moulded. Immediately below the vessel is the boss of the elephant's forehead on which it was shaped. The boss is conspicuously painted. Behind Ṛṣabha is a fly-whisk bearer. The illustration at the Museum of Fine Arts, Boston (B 17,2278.80, C pl. XIV. 80, not reproduced here) has a legend *hastinūrtikābumbha* (elephant-image-pot); our painting has a legend *ādiṣajendraśaḍaḥaḥaṇ* (Ādi-elephant-pot).

FIG. 124. Fr.77r. Two scenes in one: (a) Ṛṣabha gives away his possessions; (b) Ṛṣabha plucks out his hair. KS 211 (Jtr 282-283). After a rule of 6,300,000 *pūrvas* (8,400,000 × 8,400,000) of years, Ṛṣabha consecrated his hundred sons as kings, then distributed alms, and on the eighth day of the dark fortnight of the month Caitra, left the world in a palanquin named Sudarśanā, and in a park, under an aśoka tree, tore out his hair and entered the state of houselessness.

The treatment corresponds to the treatment of similar events in the life of Mahāvīra in figures 70 and 73.

Similar subjects to (a) are presented in figures 70, 71, 91, 111; similar subjects to (b) are presented in figures 73, 74, 96, 111, 112.

FIG. 125. Ha.114r. Ṛṣabha receives the first alms. Implicit in KS 212 (Jtr 283); explicit in R 3,277-302 (Jo 179-181). After initiation Ṛṣabha fasted for a thousand years, not from intention, but because people knew nothing about the correct way of giving alms. Many of those who had taken the monk's vows with him were unable to endure the fasting and died, and Ṛṣabha therefore decided to accept alms. His great-grandson, King Śreyāṇsa, recalled from a previous existence what constituted proper alms, and offered Ṛṣabha some jars of sugar-cane juice which someone had just brought. Ṛṣabha held out his hands to serve as a receptacle, and Śreyāṇsa emptied the jars into them. Although the juice was much, the Blessed One's hands miraculously held it all. Then the juice in the Master's hands solidified into a lofty pillar, and on this Ṛṣabha broke his fast.

In the painting we see under a canopy Ṛṣabha standing in monk's dress and facing him Śreyāṇsa in royal raiment. Ṛṣabha has his broom under his right armpit, and in his right hand his mouth cloth. Śreyāṇsa presents him with sugar-cane juice in a jar with a narrow neck and a flaring mouth. Between the two is another jar falling to the ground, shaped like a monk's begging bowl, even including the handle, and on the ground is another. Ṛṣabha's hands are hardly in a position to take the juice.



FIG 122

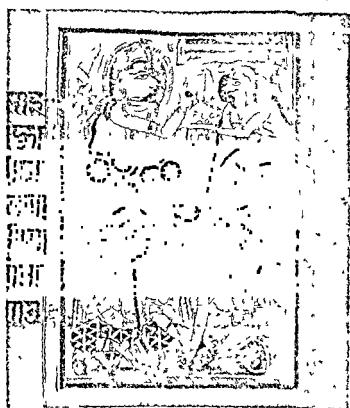


FIG 124

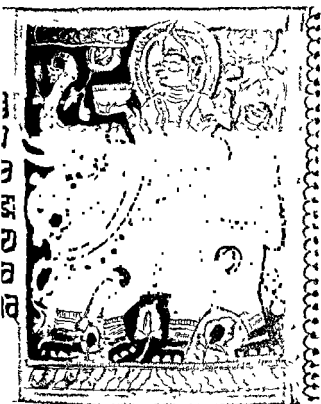


FIG 123

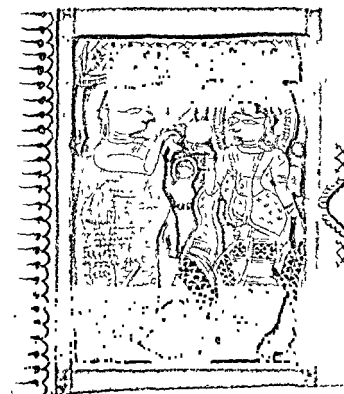


FIG 125



FIG. 126



FIG. 127



FIG. 128



FIG. 129

PLATE 38

FIG 126 H₁ 115v Rābha's *samavasarana* K.S. 212 (Jtr 283) After a thousand years of austerities, on the eleventh day of the dark fortnight of the month Phalguna outside the town Purumatāli under a *nyagrodha* (banyan) tree following an eight meal fast without drinking water Rābha reached the highest knowledge. Then the gods erected his *samavasaraṇa* for which see under figure 80.

The treatment is like that of Mahāvīra's *samavasarana* in figure 80.

Similar subjects are portrayed in figures 80, 99, 113.

FIG 127 H₁ 116r Marudevi's omniscience. Implied in K.S. 213 (Jtr 284) explicit in R 3488-534 (Jo 194, 198). Rābha's mother, Marudevi (or Marudevā) grieved by the separation from her son and the contemplation of his sufferings as an ascetic wept herself blind. When Rābha had come into his *samavasarana* his son Bharata went to inform Marudevi and took her on an elephant to see Rābha. At the sight her blindness vanished washed away with tears of joy and with her physical blindness so too vanished her spiritual. She attained to omniscience and immediately died thus achieving salvation the first person in this declining world age to do so. Her funeral rites were the first in the world and became a model for the future.

In the painting Rābha is seated at the left in a spired shrine which represents the square shrine from which he preached in his *samavasarana*. At the right is Marudevi on an elephant come to worship him holding an offering in her two hands. Above the upraised trunk of the elephant is a water pitcher. The painting has a marginal legend *marudevā svaminī gaṇendrapari vāndī*. 'The Lady Marudevi worships on an elephant.'

FIG 128 Fr. 79v Kāśha as a Siddha K.S. 277 (Jtr 285) After a life of 8,400,000 *puras* (8,400,000 × 8,400,000) of years on the thirteenth day of the dark fortnight of the month Mṛgha after a fourteen meal fast without water on the summit of Mount Astapada Rābha died. See under figure 81.

The representation is like that of Mahāvīra as a Siddha figure 81.

Similar subjects are shown in figures 81, 100, 114.

FIG. 129 Hg 102v Two scenes in one. (a) Rābha in meditation. (b) Conquests of the Cakravartin Bharata. Implicit in K.S. 212, 227 (Jtr 283, 85) explicit in R 393, 123, 234, 385, 644-692, 41, 567, 728, 797 (Jo 168, 170, 176-187, 208-212, 213, 257, 263, 266).

In (a) Rābha stands in meditation flanked by two nuns. These are probably his daughters Brahmi (daughter of his wife Sumringalī, wife of his son Bahubali and first to learn the alphabets) and Sundarī (daughter of his wife Sunanda, wife of his son Bharata and first to learn arithmetic). When Rābha preached his first sermon Brahmi became the first nun. Sundarī also wanted to become a nun but was restrained by Bharata and became the first laywoman. Later (R 4728-797, Jo 263, 266) she became a nun. In K.S. 215 it is stated that when Rābha died the community of nuns was headed by Brahmi and Sundarī.

In (b) we are shown Rābha's son Bharata the first Cakravartin (universal ruler) on his tour of conquest (R 41, 567, Jo 213, 252). The usual procedure was for him to follow the wheel (jewel) of empire (*cakra*) until it stopped. Then he would shoot an arrow to the hall of the nearby king usually at some great distance such as 12 *yojanas*. When it alighted the king would rise in rage and seize a weapon to go attack Bharata but some attendant would by his clairvoyant knowledge recognize that the arrow had come from the invincible first Cakravartin and would persuade the king to submit.

Bharata is at the left of the picture with the arrow drawn. The enemy king stands at the other side of the picture with shield in hand and sword brandished above his head. Between the two is a smaller figure which may possibly be Bharata's charioteer who is regularly mentioned in the text but seems to me more likely to be the minister who admonishes the king to yield.

PLATE 39

FIG. 130. Fr.Str (cf. Sh pl. VI). The eleven Ganadharas of Mahāvira. KSsth 1-2 (Jtr 286-287). Mahāvira had eleven chief disciples (*ganadhara*), who founded nine schools (*gana*). The discrepancy between the numbers eleven and nine is explained by the fact that in two cases two of the disciples combined to found a single school. The text gives the names of the eleven: Indraabhūti, the eldest of the monks; Agnibhūti, the middlemost of the monks; Vāgubhūti, the youngest of the monks; the others were Ārya Vyakta, Ārya Sudharman, Mandhaputra (or Manditaputra), Mauryaputra, Akampita, Acalabhrātī, Metāya, and Prabhoḥa. Of these all but Indraabhūti and Sudharman died before Mahāvira. When Mahāvira died, Indraabhūti became head of the order but lived only a month, and following him Sudharman was head. All the spiritual descendants of Mahāvira today come through the line of Sudharman, and the text (Śāśāyāvalī) gives the line of pontiffs from Sudharman on. There are, of course, variant lines. The line of pontiffs (*catkara*) is carried in the text down to Devarddhi, who, according to tradition, presided at the great council of Mathurā, 680 or 693 years after Mahāvira's death (according to the traditional reckoning, A.D. 452 or 465).

The painting shows seated in the center a figure much larger than the rest, who may be taken for Indraabhūti. Across the top is a row of four monks; across the bottom another row of four. At the level of Indraabhūti's head are two other monks, one on each side. Standing beside Indraabhūti, in a posture of reverence, are two monks, evidently not Ganadharas. All the Ganadharas are seated cross-legged, with the right hand in the gesture of exposition. Each has his broom under his right arm, and on his bare right shoulder a small rectangular object, which may be taken for the end of his mouth cloth. The whiteness of the robes is depicted by white dots on a gold background.

FIG. 131. B17.2278.95 (cf. C 52, pl. XV.95). The eleven Ganadharas of Mahāvira. KSsth 1-2 (Jtr 286-287). See under figure 130.

The eleven Ganadharas are of equal size. They are arranged in four rows, of which the first, third, and fourth contain three each, and the second contains two, the remaining space in that row being occupied by a figuration of the mystic syllable *hrīṃ* (*hrīṃkara*; cf. C 74, Gl 385, Br 122).

FIG. 132. B17.2277.54 (cf. C 48, pl. VIII.54). The eleven Ganadharas of Mahāvira. KSsth 1-2 (Jtr 286-287). See under figure 130.

The treatment is much like that of figure 131, but it is the fourth row that contains only two Ganadharas, and the remaining space is now filled with the mystic syllable *om* (*ombhara*), within which is also the Wheel of Perfection (*śiddhacakra*); for these symbols see Gl 384, Br 122.

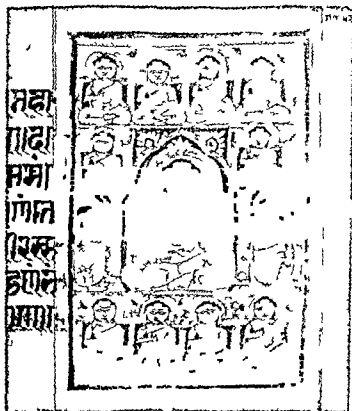


Fig. 130



Fig. 131

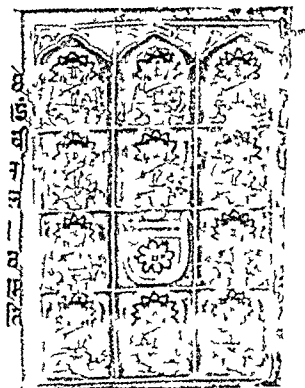


Fig. 132



FIG. 135

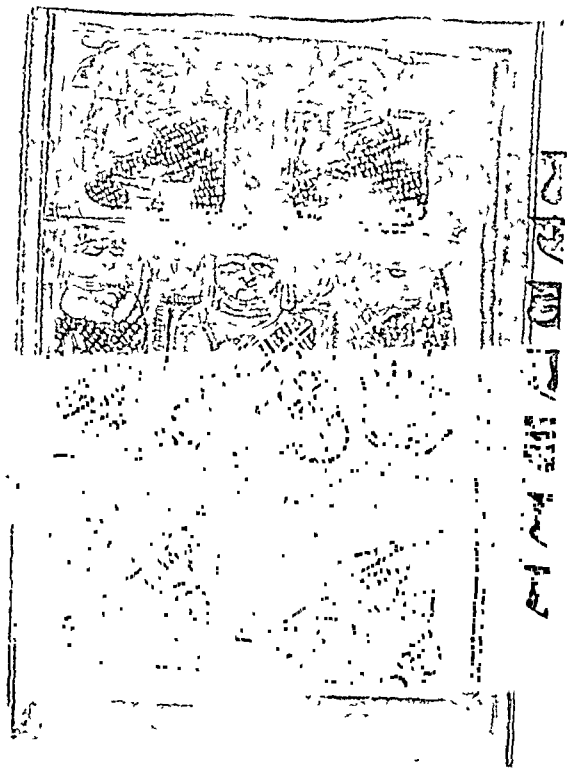


FIG. 133

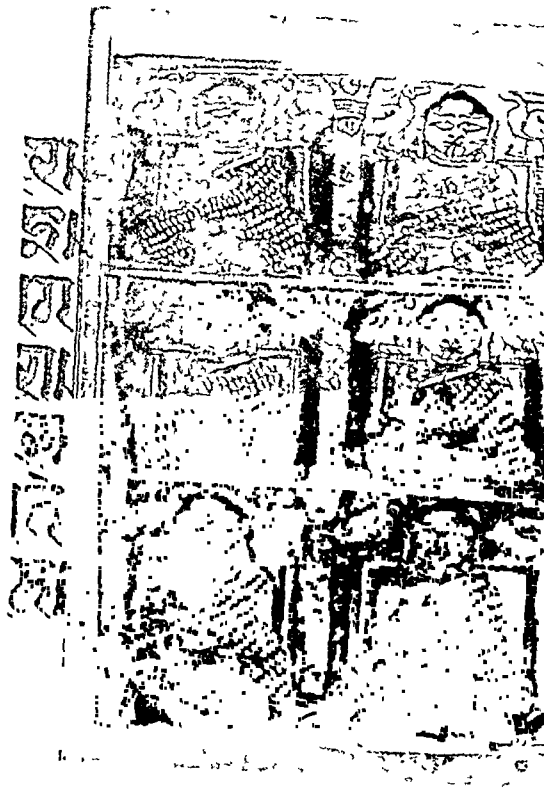


FIG. 134

ILLUSTRATIONS AND DESCRIPTIONS

PLATE 40

FIG 133 B22 364 107 left (cf C 57, pl X\ 107) Five of Mahavira's eleven Ganadharas (and the nun Candana?) KSsth 1 2 (Jtr 286-287) See under figures 8, 130

In this and its companion illustration (our fig 134) are represented Mahavira's eleven Ganadharas accompanied by two other figures one a monk and the other a nun This painting shows three tiers with two monks seated in the upper tier two in the lower and one in the central which last is done larger than the others and is perhaps meant to be Indrabhuti the senior of the eleven Beside him stand on one side a monk and on the other a nun whose sex is evident from the fact that the robe extends up behind her neck and head Who the monk is I cannot say perhaps he merely represents all the rest of the monks the nun might be Candana the head of the order of nuns

Dr Coomaraswamy (C 57) takes this to represent Mahavira with six of his Ganadharas and notes that this number with the six of the accompanying illustration make a total of twelve instead of eleven He did not recognize that one of the figures is a nun Further the legend of the two illustrations is merely 11 gana which would seem positively to exclude the presence of Mahavira in the group

FIG 134 B22 364 107 right (cf C 57, pl X\ 107) Six of Mahavira's eleven Ganadharas KSsth 1 2 (Jtr 286-287) See under figure 130

This painting is a companion piece to our figure 133 where it is discussed in KSsth 4 5 (Jtr 287-289) expl cit in PP 61 4 81 193 9 55 103 (Jpa 41 50-55 64 66) The entire story of Stulabhadrā his sisters and Bhadrabahu is of exceptional interest but must here be confined only to a summary of the portions illustrated in our miniatures

Yasobhadra the fifth head of the church after Mahavira's death left as his successors Sambhuvijaya (through whom the line of spiritual descent was later handed down) and Bhadrabahu (the reputed author of the Kalpasutra at least of the Jinacarita the portion containing the lives of the Tirthankaras) Sambhuvijaya had among his disciples Stulabhadrā and Stulabhadrā's seven sisters

Before conversion Stulabhadrā had lived in Pataliputra the city of Patna in modern Bihar for 12 years with a courtesan named Kosa After his conversion he once undertook as a penance during the four months of the rainy season when monks must not wander about to live in the house of his former mistress Despite her seductions he maintained his vows although another monk who later undertook to imitate him was easily led astray About this time Sambhuvijaya died The king of Pataliputra gave this courtesan Kosa to a charioteer exhibited his skill at archery by sitting down in a garden and piercing a cluster of mangoes with an arrow then he shot a second arrow into the end of the first a third into the end of the second a fourth into the end of the third and continued until he was able to hand Kosa the mangoes without leaving his seat²⁰ But Kosa showed equal skill in dancing She heaped up mustard seed on the floor put a needle in the heap and covered it with flower petals and then danced on the heap without scattering the seeds or hurting her feet on the needle The charioteer was greatly pleased and promised Kosa any reward that he could give But Kosa replied that her exhibition was nothing wonderful for it was merely an exhibition of skill acquired by practice but Stulabhadrā's deed was of a different sort for he had subdued the passions Upon this the charioteer adopted the Jain faith and Kosa became a nun

A 12 year famine now came upon the land of Bihar and the Jain community was scattered (It was at this time that Bhadrabahu is said to have led a large portion of the community to the southern part of India where they made their headquarters at Sravana Belgola in the modern Mysore state now the chief center of the Jain canon was in danger of being lost When it was over During this period of confusion the Jain canon was in danger of being lost When it was over the Sangha (community) reassembled in Pataliputra and collected as much of the canon as the

²⁰ A frequent Hindu fct on motif cf Br 25 140

monks happened to remember, being the *thirteenth*. To recover the twelfth *mag* (the *Drivada*) the monks sent two of their number to Bhadrabāhu, who was then in Nepal, commanding him to join the council at Pataliputra and impart this *mag*. Bhadrabāhu could not come, because he was engaged in a vow that would require 12 years of austerity. Eventually the Sangha sent to him 500 monks headed by Śhūlabhādra to learn the *Drivada*. All but Śhūlabhādra became discouraged by the slowness of their progress, but Śhūlabhādra persevered in learning 10 of the 11 *pages* comprising the *Drivada*. By that time Bhadrabāhu's vow had come to an end, and he returned to Pataliputra accompanied by Śhūlabhādra.

Śhūlabhādra's seven sisters, who reported above had become nuns, went to pay their respects to Bhadrabāhu and asked him where to find their brother. Bhadrabāhu directed them. When the seven sisters approached, Śhūlabhādra thought to gratify them with a miracle and transformed himself into a lion. They ran back to Bhadrabāhu in frantic reporting that he had become a lion. Bhadrabāhu told them the truth, and they returned. They told Śhūlabhādra their various adventures during his absence in Nepal, including the noteworthy conversion of the eldest sister. She related how she had been carried away by a demon to the realm of the Jina Simandhara, where she had been taught four sacred texts, and she led him to the cave.

When his sisters had left him, Śhūlabhādra went to Bhadrabāhu to continue his lessons and learn the remaining four *pages* of the *Drivada*. But Bhadrabāhu declared that Śhūlabhādra, in vain gloriously performing a miracle, had shown himself unworthy to receive the holy knowledge. At last, on being urged by the Śarada, Bhadrabāhu consented to teach Śhūlabhādra the remaining four *pages*, on condition that Śhūlabhādra should not transmit them. When Bhadrabāhu died, Śhūlabhādra became head of the church.

The painting shows a nun, seated on the ground, reciting the sacred texts of which *śāstra* is a term, whose sex is indicated by her robes, by her upturned hair, and by her lotus position. The painting is unlabeled, but seems to belong to the story of Śhūlabhādra. It occurs on the same page as KS 74a, in which the names of Śhūlabhādra and Bhadrabāhu were recorded. And on the same page is the name of Simandhara, Śhūlabhādra's precursor as well as the precursor of Śhūlabhādra's seven sisters.

The painting might have any one of three interpretations: (1) it might represent Śhūlabhādra's eldest sister reciting to Śhūlabhādra the sacred texts she had learned from the Jina Simandhara. The acquisition of such texts is so vitally important to justify a picture, but the suggestion seems invalid, because the next painting in the same MS. (our fig. 127), following by three folios, shows the sisters before Śhūlabhādra as a lion, and the reciting of the texts required by the nun did not come until after the sisters had seen Śhūlabhādra in his disguise. Or (2) it might represent Śhūlabhādra's eldest sister, as speaking for all seven, telling the adventures of them all. This suggestion also seems invalid, because of the order of events in the Śhūlabhādra story. Or (3) it might be meant to show the eldest sister, speaking for all, at the time when she asked Bhadrabāhu where to find Śhūlabhādra. This suggestion makes the order of illustrations in the MS. correspond with the order of incidents in the story, and it therefore seems to me to be the most plausible. Paintings in other MSS. that I have seen give no help.

PLATE 41

FIG. 136 Fr.85v (cf. C 57, pl. XX.123). Two scenes in one: (a) Sthūlabhadra as a lion in a cave, with his sisters; (b) Sthūlabhadra's sisters before Bhadrabāhu (or Sthūlabhadra). Implicit in KSsth 4-5 (Jtr 287-289), but explicit in PP 9 55-103 (Jpa 64-66). See under figure 135

In the upper register is Sthūlabhadra as a lion, meant to be in a cave (better shown in fig. 137)—notice the curled tail. Before him stand two nuns, who typify all seven sisters. In the lower register is a monk addressing the two nuns

The interpretation of the lower scene is open to doubt. It might represent either (1) the seven sisters asking Bhadrabāhu where to find Sthūlabhadra; or (2) the sisters telling their adventures to Sthūlabhadra. The fact that it appears in the painting below the scene of Sthūlabhadra in the lion cave is not decisive; for in paintings containing one or more scenes events in the lower register often precede chronologically those in the upper register. Also, in a parallel painting (B 22.364,123; cf. C pl XX 123) not reproduced here, the same two scenes appear but with the position reversed. I am, therefore, inclined to think that the lower scene here shows the sisters before Bhadrabāhu.

FIG. 137. Ha.125r. Sthūlabhadra as a lion, with the eldest of his seven sisters. KSsth 4-5 (Jtr 287-289). See under figure 135.

The lion stands before a mountainous landscape. Overhead is a canopy. Only one sister is shown, who would be the eldest; the rest appear in the companion piece (our fig. 138) in the same MS.

FIG. 138 Ha.125v. Sthūlabhadra's six other sisters. KSsth 4-5 (Jtr 287-289). See under figure 135

This painting is a companion piece to our figure 137, and shows the remaining six sisters. Note the variety of arrangement of dots and lines to indicate the nuns' white robes.

FIG. 139 Fr.86r (cf. C 53, pl. XV.100). The courtesan Koṣā and the king's charioteer. Implied in KSsth 5-6 (Jtr 288-289), explicit in PP 8.170-193 (Jpa 54-55). A part of the story of Sthūlabhadra, see under figure 135.

At the extreme right is a mango tree, the top leaning over to balance the composition. At the left is the charioteer, who is standing, not sitting as in PP, and shooting his bow. Between him and the tree is Koṣā dancing, and below her right foot is the heap of mustard seeds and the needle, which in the story was covered with flower petals but here is clearly visible. At the top are clouds.

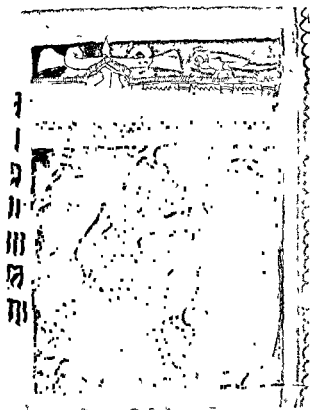


FIG. 137

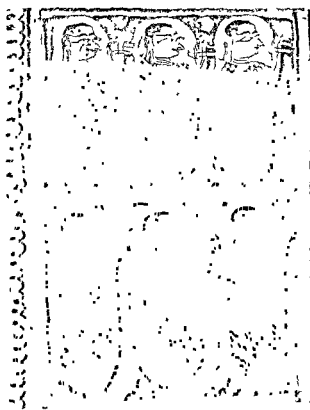


FIG. 138



FIG. 136



FIG. 139



FIG 140



FIG 141

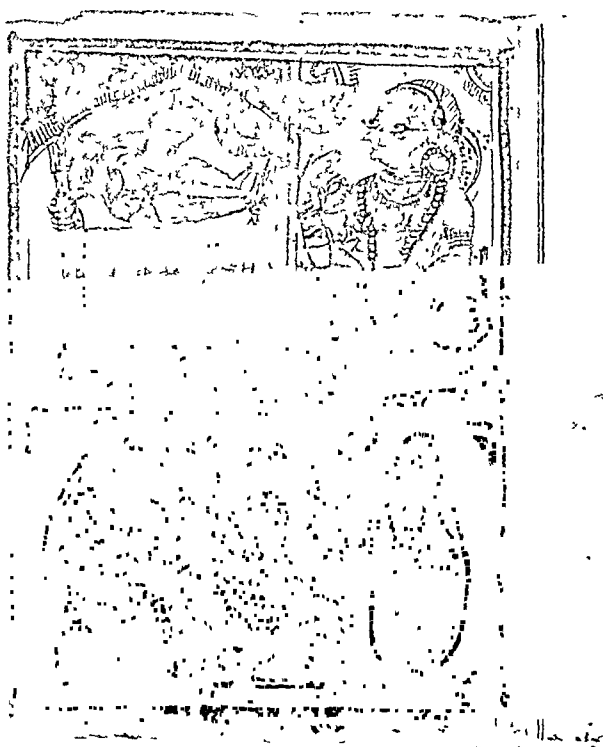


FIG 142



FIG 143

PLATE 42

FIG 140 Ha131v Two scenes in one (a) Vajra being given to his father (b) Vajra in care of the nuns. Implicit in KSsth 4 11 (Jtr 288 292 293) explicit in PP 11 i 138 (Jpa 71 74). These are scenes from the childhood of the Sthavira Vajra.

The layman Dhanagiri having vowed to leave the world did so as soon as his son was born. This son was the incarnation of the soul of a god who had heard the Jain doctrine preached by *Gautamasvamin*. The child shortly after being born, overheard the conversation of some women attending his mother at her lying in, and learned that his father had become a monk. Desiring to share his father's life the child determined to tire out his mother's patience by his bad behavior and no device could appease him. About that time the father Dhanagiri came there with his spiritual preceptor, who allowed Dhanagiri to go visit his former family and told him to accept whatever was offered him. When Dhanagiri arrived the mother at the instigation of some relatives extended to him the child. Dhanagiri accepted it and left. The child was preternaturally heavy to carry and therefore received the name Vajra (thunderbolt). Dhanagiri handed it over to his spiritual preceptor (*guru*) who in turn handed it over to the nuns and these last entrusted it to the women at their lodging house. The boy then became a perfectly behaved child. The mother seeing the change wanted the child back, but the women refused to surrender it. However they allowed the mother to come to the house and nurse it. Once when the child was three years old she claimed it. Dhanagiri would not surrender it. The case was referred to the king and he said the child should go with whichever one it would heed. The mother tried first and offered it play things but the child ignored them. Then the father told it to take up the broom if it wished to become a monk and Vajra took it.

In the upper register is Dhanagiri seated at the left and at the right is Vajra's mother handing the father the troublesome child. The child leaps to his father with eagerness seeing fulfilment of its desire to enter the holy order. In the lower register is the child in care of a nun (one nun being shown to indicate the entire number). It is in its cradle which has a brick and swings in a frame the whole being much like cradles today in wealthy homes of Gujarat and Sind. In the paintings the women of the lodging house do not appear either the nuns care for the child or else its mother suckles it.

FIG 141 B17 227898 (cf C 53 pl XV 98) Two scenes in one (a) Vajra being given to the nuns, (b) Vajra in his cradle. Implicit in KSsth 4 11 (Jtr 288 292 293) explicit in PP 11, 1-68 (Jpa 71-72). See under figure 140.

In the upper register is seated Sīhagiri the spiritual preceptor of Dhanagiri who has just delivered the babe Vajra to a nun. Vajra is seen in a small circle just below the nun's outstretched arm. In the lower register is Vajra in a swinging cradle attended by a nun.

FIG 142 Hd 63r Three scenes in one (a) Vajra in his cradle (b) Vajra being nursed by his mother (c) the nuns who cared for Vajra. Implicit in KSsth 4 11 (Jtr 288 292 293) explicit in PP 11 i 168 (Jpa 71-72). See under figure 140.

In the upper register at the left is Vajra in his cradle which is less elaborate than those in our two preceding illustrations. At the right is Vajra's mother nursing him having received the nuns' permission. At the bottom are the nuns who are charged with raising Vajra.

FIG 143 Hg 110v Two scenes in one (a) Vajra in his cradle (b) Vajra chooses his father and a monk's life rather than his mother and child-like playthings. See under figure 140.

For (a) cf figures 141b and 142a. For (b) see end of Vajra story under figure 140. At the left sits the king in judgment. Facing him is Vajra's mother who extends a toy horse. Below her is Dhanagiri holding out the broom for which Vajra is reaching.



PLATE 43

FIG 144 Hg.113r Two scenes in one (a) Rohagupta and Pottasala debating, (b) defeat of Pottasala's magic arts Implicit in KSsth 6 (Jtr 290) explicit in *Vivecavasiṣaḥaḥasya* with Hemacandra's commentary *Sisyaḥuṭā*, part 4, (ed Hargovind [Das T Sheth], *Asaviyaya Jama Granthamālā* No 31, pp 781 785 Dharmabhyudaya Press Benares, VS 2438 [AD 1911]), see also Leumann, *Indische Studien* vol 17, pp 116 123 Leipzig 1885

The reference is to the story of Chaluḡya (sometimes rendered Saḡuluka) Rohagupta reputed founder of the Teraḡiya (Traḡṡika) schism, the sixth great schism of the Jain community, from which the Jains claim that the Vaḡeḡika philosophers draw their origin He is said to have created the schism in VS 244 (traditionally in Jain chronology, AD 17 or 18) On the contrary, there is doubt that this dating is correct for KSsth says that this Rohagupta was a disciple of Mahagiri, and must therefore have lived in the third century BC The question is discussed by Charpentier in the introduction to his *Uttaradhyāyasūtra*, pp 19 20 Uppsala 1922 Apparently there existed more than one Rohagupta For the purposes of our identification of the painting, the important matter is the story traditionally associated with Chaluḡya Rohagupta

Near the city of Antaraṡjika, where ruled king Balasri, was a shrine Bhutaḡra in which was the master Sṡgupta He had a disciple named Rohagupta (note contradiction of KSsth, which makes Rohagupta the disciple of Mahagiri) This disciple once, when coming from a village to see his master, came to the city Antaraṡjika, and found there an ascetic who had an iron band around his stomach and walked with a staff of the Jambu tree The ascetic said he wore the band because his wisdom was so great that he had to restrain it lest it burst his belly, and he carried the Jambu staff because in the continent of Jambudvīpa there was no one his equal in wisdom He had a drum sent around the city to offer an open challenge of debate to all comers Because he bound his belly with a band and carried a staff, people nicknamed him Pottasala 'Belly branch' Rohagupta unwisely failing to get his master's permission touched the drum and accepted the challenge to debate Then he went to his master and informed him The master said he should have let Pottasala alone, but since he had touched the drum, there was nothing to do but go ahead This Pottasala he said even if worsted in argument, still had seven magic arts, with which to overwhelm an opponent namely, the scorpion, the serpent, the mouse, the doe, the female wild hog the crow and the *potaki* (for which Leumann says "thrush" the commentary merely says *sakunika* relating to birds") But the master gave him the formulae for calling to his aid seven counter magic arts the peahen the female mongoose, the cat, the tigress, the lioness the she owl and the *uvai* (for which the commentary offers the doubtful Sanskritization *ulāraḡi*, I do not know the meaning) And he also gave him his charmed broom to use in case Pottasala should produce another magic art If he would wave this broom over the head of the magic art, even Indra's magic would not prevail against him The debate was held before the king and the subject was the number of categories of substances

called on his magic arts But each was successfully routed by the counter magic art Finally Pottasala produced as a surprise the she ass magic art (cf Br 4) but Rohagupta waved the broom over its head, and the magic art turned, dunged and urinated upon Pottasala and fled Rohagupta was left victor There is a sequel in which the master refutes Rohagupta's heresy of the third substance, although Rohagupta refuses to recognize his error

In the upper part is the king seated on his throne Before him in attitudes of respect sit the two opponents Rohagupta is above and is dressed as a Jain monk his broom under his left armpit Pottasala is below him, and is dressed as a layman The two are, of course, understood to be sitting side by side

In the lower part of the painting are several pairs of magic arts opposed to each other The peahen is at the left with the scorpion beside her At the bottom on the right are the snake and the

mongoose. Above them are the owl and the crow, and another bird, presumably the *potākī*, although its opponent is not shown. The other magic arts are not represented.

FIG. 145. B17.2277,61 (cf. C 48, pl. VIII.61). A Sthavira. KSsth 13 (Jtr 295). At the end of the KSsth the compiler pays his reverence to a number of Sthaviras, in the last few verses selecting especially Jambu, Nandita, Deśigaṇin, Sthiragupta, Dharma, and Devarddhi.

In a temple sits a monk (probably not a Jina as stated in C 48; cf. folios 48 and 54 from same MS., and our figure 132, where the iconographic difference between Tirthankaras and Sthaviras is made clear). He holds a rosary in his right hand in a gesture often characteristic of pious Jains in pose today. Around his head is a pointed halo, frequently used with Sthaviras (see figs. 82, 132), and below his throne is a lotus (cf. fig. 82). On the roof are two peacocks.

The painting might represent under a single figure the entire series of Sthaviras, or it might represent the selected group the author chooses to name, or it might represent the celebrated Devarddhi, the codifier of the Śvetāmbara canon (A.D. 452 or 465).

FIG. 146. Fr.94r. Mahāvīra as a Siddha. KSSām 1 (Jtr 296). Mahāvīra taught the Sāmācārī (rules of conduct for monks during the rainy season).

The representation is like that of figures in three other folios of the same MS., nos. 61v, 67r, and 75r, not reproduced here, and appears here merely in connection with Mahāvīra's name.

FIG. 147. B22.364,124 (cf. C 57, pl. XXI.124). Indrabhūti Gautama (?). KSSām 3 (?) (Jtr 297). The Gaṇadharas, of whom Indrabhūti Gautama was the chief, are mentioned in section 3 of the text.

The painting comes in the MS. just at the beginning of KSSām and bears a legend *gotama*, which would indicate that it concerns Indrabhūti Gautama. It could then be understood to show Indrabhūti Gautama transmitting to his followers the rules of the Sāmācārī, which he had received from Mahāvīra. However, the scene is so closely analogous to those of Mahāvīra preaching the Sāmācārī (fig. 150) that it is possibly wrongly labeled in the MS.

Under a canopy sits, at the left, a monk preaching. Facing him are two male figures, the one at the top being a layman, the one at the bottom, who would be on the Teacher's right, being a monk.



FIG 144

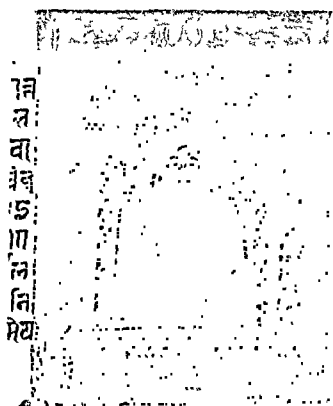


FIG. 145



FIG 146



FIG 147

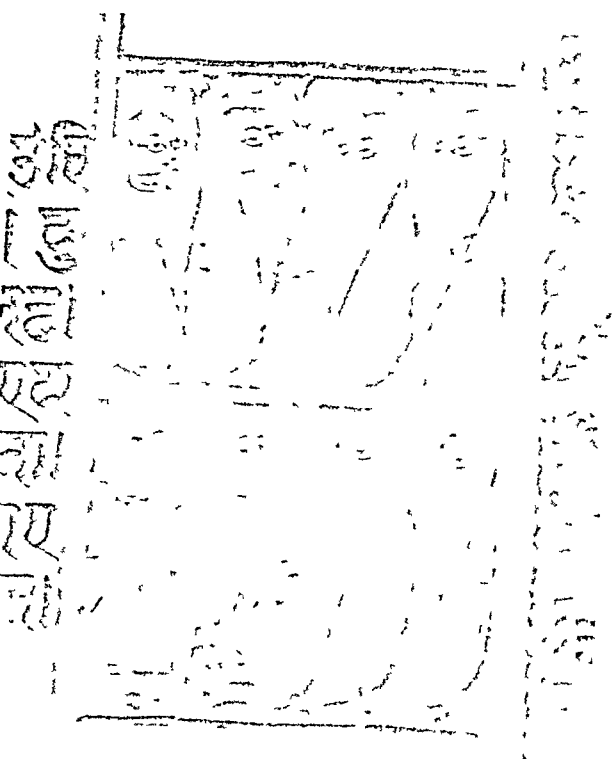


Fig 145

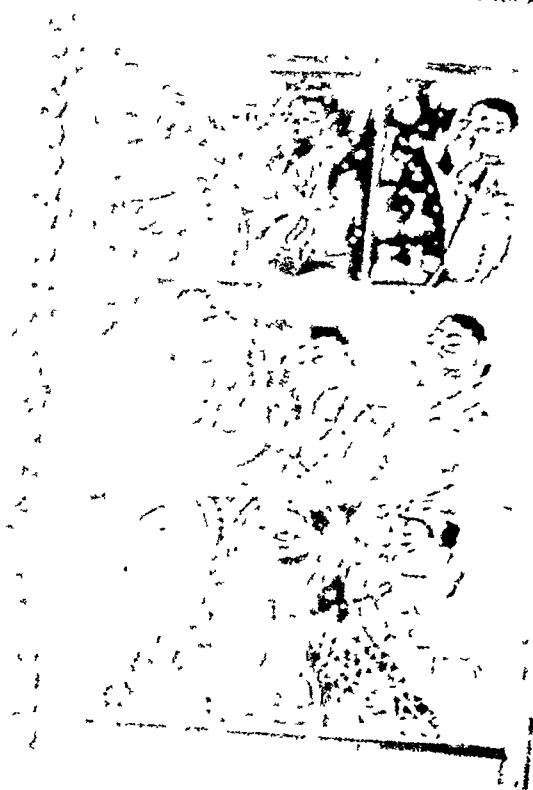


Fig 146



Fig 150



Fig 151

PLATE 44

FIG 148 Hg 132v Two scenes in one (a) Rules of concourse of monks and nuns during rainy season (b) rules of concourse of monks and laywomen during rainy season Ks m 38 39 (Jtr 303) During the Paryusana it is not allowed that at the same place there should stand together one monk and one nun one monk and two nuns two monks and one nun nor two monks and two nuns But if there be a fifth person a male or female novice or if the place is open to view or doors open on it then they may stand there together The same rule applies to one monk and one laywoman and the other combinations mentioned in the case of nuns But if a fifth person be present an elder male or female or the other conditions be met then they may stand there together

In the upper part of the painting we have the minimum number for monks and nuns that is two monks on the left faced by two nuns on the right—whose hands are in a gesture of respect to the monks for monks are always superior to nuns—and the fifth person present between them a male novice

In the lower part of the painting we see the minimum number of monks and laywomen The two monks are at the right and facing them are the two laywomen In the center is a novice apparently female The text calls for an elder but the painting does not seem to conform

FIG 149 Hg 141v Monks nuns and layfolk during the rainy season KSam entire with especial reference to KSam 59 (Jtr 309) While farmers carry on their seasonal occupation monks and nuns are restricted in their rules of begging and of travel and are urged to especial care of their conduct toward one another If there occurs dissension among them the junior must always ask forgiveness of the superior During the Paryusana there is usually a great deal of preaching

The meaning of the painting is not entirely clear At the top is a farmer with a bullock possibly he is engaged in some agricultural pursuit At the right is a monk who is possibly out begging In the center a nun is seated while another nun kneels before her apparently asking forgiveness A third nun stands behind the second At the bottom are three layfolk of whom the one in the center is a man The sex of the other two is not absolutely certain but I believe the one at the right is a woman and the one at the left a man

FIG 150 Fr 108v Mahavira preaching the Samacari KSam 64 (Jtr 311) At the end of the Samacari it is stated that the Venerable Ascetic Mahavira delivered this discourse called the *paryusandakalpa* in the town of Rajagrha in the *cetiya* (shrine) Gunasilaka surrounded by many monks nuns laywomen gods and goddesses

Mahavira sits on a spired throne lecturing mouthcloth in hand On a lower seat before him is a monk receiving the instruction Our figure 151 a companion to this shows the rest of the audience

In many variants Mahavira sits facing forward in an elaborate representation of the shrine Gunasilaka with spires and semispikes surmounted by a banner and monkeys and parrots seated on the roof The Tirthankara may be in full ornament as in a *sarvasarana* An example not reproduced here is B17 2277 72 (C 48 pl IX 7)

FIG 151 Fr 109r Part of Mahavira's audience as he preached the Samacari KSam 64 (Jtr 311) See under figure 150

This illustration is a companion scene to figure 150 and shows the rest of Mahavira's audience In the top row are three laymen (or gods) seated upon cushions in the middle row are three laywomen (or goddesses) and on the bottom row occupying seats of the type commonly used today by monks and nuns are three nuns It seems preferable to understand the audience as monks nuns laymen and laywomen which together constitute the fourfold Sangha rather to see in any of the figures gods and goddesses

PLATE 45

FIG. 152. Fr, cover. The fourteen lucky dreams. See under figures 6, 18-33.

This is the cover to the Freer Gallery MS. of the *Kalpasūtra*. It is of cloth, lacquered and painted. The cover boards seem to be contemporary with the manuscript and quite possibly were executed by the same artist; note that the textile design of the goddess Śrī's *dhōṭī* here is identical with that in our figure 18, which is from the same manuscript.

The colors are slightly different in tone. The difference may be the consequence of the different backgrounds on which the pigment was applied. The difference in the reds, again, may be due to the fact that the artist had at his command two different shades of that color (see Br 126). For a reproduction of a page from this same manuscript (Fr) in full color see Br, plate 12 (facing p. 138).

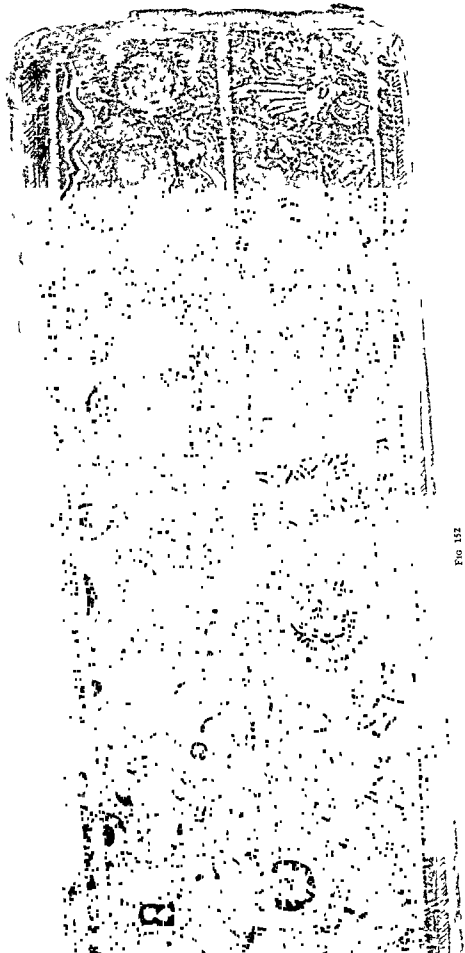


FIG 152

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navanidhi, 28
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 of king in "undress," 24
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S

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